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# TRENDS IN INFANT AND CHILDHOOD MORTALITY, 1961

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# TRENDS IN INFANT AND CHILDHOOD MORTALITY

## 1961

Eleanor P. Hunt, Ph.D.

Stanley M. Goldstein, B.A.

Child Health Studies Branch
Division of Research

U. S. DEPARTMENT of HEALTH, EDUCATION, and WELFARE
WELFARE ADMINISTRATION
Children's Bureau
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# INFANT AND CHILDHOOD MORTALITY 1961

The purpose of this report is to make available current and trend statistics concerning problems in infant and early childhood mortality which bear closely on the planning of health services for mothers and children, and have value as well in periodic evaluation of programs and services.

The report comprises statistical tables and charts, such as have been carried in earlier issues of the Statistical Series. General comments on the principal facets of natality and mortality relevant to programs and services are included.

## Total Births

In 1961, 4,268,326 births of live born infants in the United States were registered, and about 69,000 stillborn, making a total of 4.337 million registered births. Stillborn refers here to fetal deaths in pregnancies of 20 or more, or not stated weeks in duration. Nearly half (48.6 percent) of the total in 1961 were in urban places of metropolitan counties (in general, a county with a city as large as 50,000 population) in contrast to 1950 when 44.4 percent were in towns and cities of the metropolitan counties. The increased urban proportion was principally in the nonwhite group. In 1950, 44.5 percent of total births to nonwhite mothers were in urban places in the metropolitan counties. In 1961, the proportion had grown to 58.3 percent. At the same time, the percent of births to nonwhite mothers in rural parts of nonmetropolitan counties (in general, no city of 50,000 or more) dropped from 36.1 percent in 1950 to 22.8 percent in 1961.

Among white mothers, the proportion of births to those living in the rural parts of the nonmetropolitan counties also decreased, but less sharply (27.5 percent in 1950; 21.9 percent in 1961). At the same time the proportion in rural parts of the metropolitan counties rose from 11.5 to 16.8 percent of total births to white mothers.

Thus the decade has been marked by a principal shift of maternity population from outlying rural areas to more highly urbanized sections, with 63.9 percent of total births in 1961 to mothers in the metropolitan counties, in contrast to 55.1 percent in 1950. The increased concentration of the maternity population of the nonwhite group was most noteworthy in urban parts of the metropolitan counties: for the white group, in the rural parts of these counties.

Despite these changes, over one-fifth of total births in 1961, were to rural mothers of the nonmetropolitan counties. (21.9 percent of births in the white group, 22.8 percent of births to nonwhite)

Table A:--TOTAL NUMBER OF BIRTHS (LIVE AND STILL) AND PERCENT DISTRIBUTION IN URBAN AND RURAL AREAS OF METROPOLITAN AND OTHER COUNTIES BY COLOR: UNITED STATES, 1961 AND 1950

| COUNTY GROUP AND AREA | 1961 | | | 1950 | | | PERCENT NONWHITE | |
|---|---|---|---|---|---|---|---|---|
| | Total | White | Non-white | Total | White | Non-white | 1961 | 1950 |
| | Number (thousands) | | | | | | | |
| United States-- | 4,337 | 3,652 | 685 | 3,622 | 3,116 | 506 | 15.8 | 14.0 |
| Urban-------- | 2,718 | 2,238 | 479 | 2,196 | 1,902 | 293 | 17.6 | 13.4 |
| Rural-------- | 1,620 | 1,413 | 206 | 1,427 | 1,214 | 213 | 12.7 | 14.9 |
| Metropolitan----- | 2,772 | 2,323 | 450 | 1,996 | 1,741 | 256 | 16.2 | 12.8 |
| Urban-------- | 2,111 | 1,711 | 400 | 1,609 | 1,384 | 225 | 18.9 | 14.0 |
| Rural-------- | 662 | 612 | 50 | 387 | 357 | 31 | 7.5 | 7.9 |
| Nonmetropolitan-- | 1,565 | 1,329 | 236 | 1,626 | 1,375 | 251 | 15.1 | 15.4 |
| Urban-------- | 607 | 527 | 79 | 587 | 519 | 68 | 13.1 | 11.6 |
| Rural-------- | 958 | 801 | 156 | 1,039 | 857 | 183 | 16.3 | 17.6 |
| | Percent | | | | | | | |
| United States-- | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | --- | --- |
| Urban-------- | 62.7 | 61.3 | 69.9 | 60.6 | 61.1 | 57.9 | --- | --- |
| Rural-------- | 37.3 | 38.7 | 30.1 | 39.4 | 38.9 | 42.1 | --- | --- |
| Metropolitan----- | 63.9 | 63.6 | 65.6 | 55.1 | 55.9 | 50.5 | --- | --- |
| Urban-------- | 48.6 | 46.8 | 58.3 | 44.4 | 44.4 | 44.5 | --- | --- |
| Rural-------- | 15.3 | 16.8 | 7.3 | 10.7 | 11.5 | 6.0 | --- | --- |
| Nonmetropolitan-- | 36.1 | 36.4 | 34.4 | 44.9 | 44.1 | 49.5 | --- | --- |
| Urban-------- | 14.0 | 14.5 | 11.6 | 16.2 | 16.7 | 13.4 | --- | --- |
| Rural-------- | 22.1 | 21.9 | 22.8 | 28.7 | 27.5 | 36.1 | --- | --- |

Charts 1 and 2 illustrate trend of the crude birth rate, and trend in the proportions of live births in hospitals, and elsewhere. The proportion of live births to nonwhite mothers in 1961, unattended by a physician, is shown in Chart 3 for 24 States where one percent or more were unattended.

The crude birth rate (number of live births per 1,000 population) has been gradually declining since 1958, reaching 23.3 in 1961. Provisional rates, for 12 month periods ending in March, were in 1962, 23.2; in 1963, 22.2; and in 1964, 21.6.

Chart 1 BIRTH RATE, BY COLOR: UNITED STATES, 1909-1961

data corrected for incomplete registration of live births

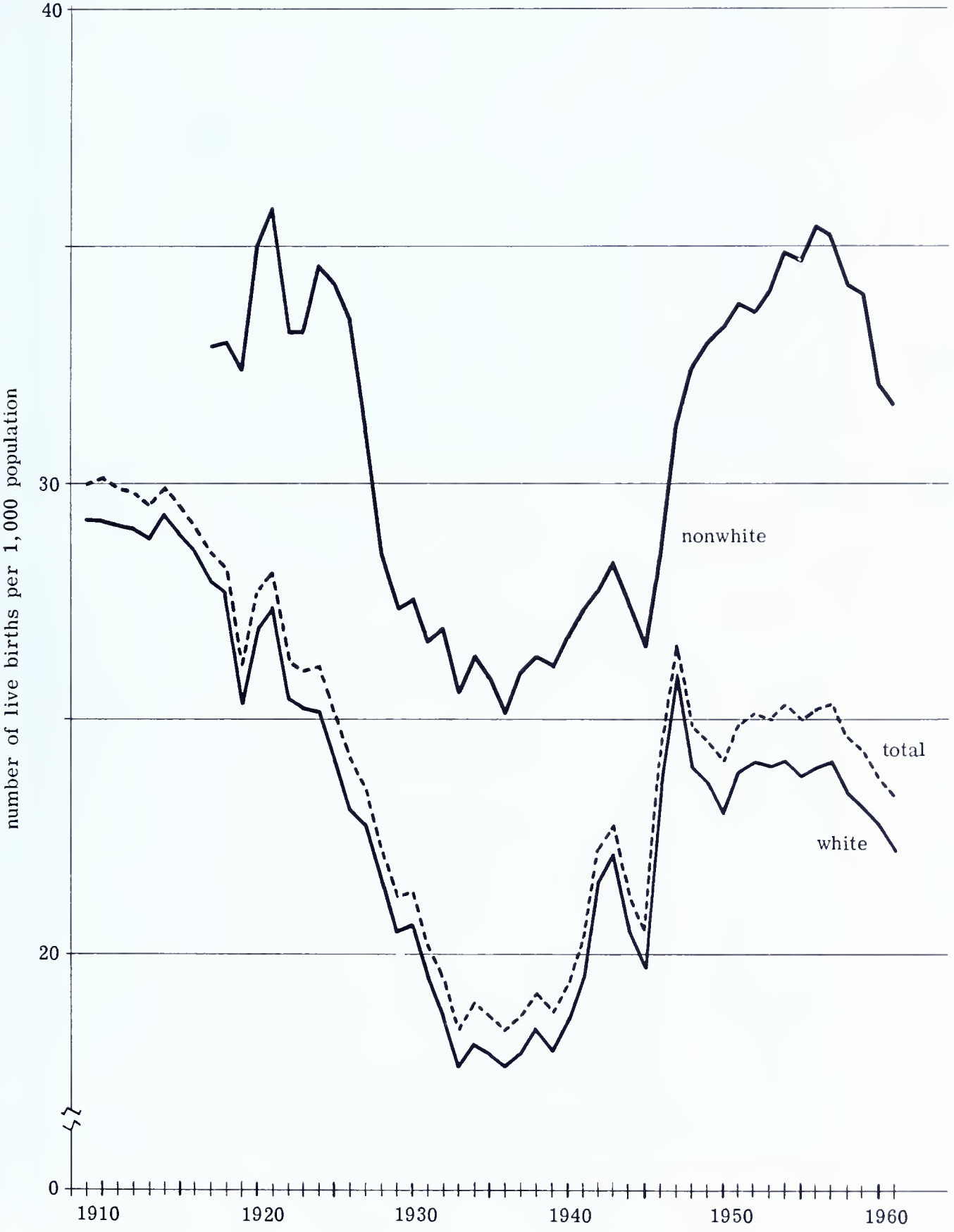




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Chart 2 LIVE BIRTHS, BY ATTENDANT, AND BY COLOR: UNITED STATES, 1935-61

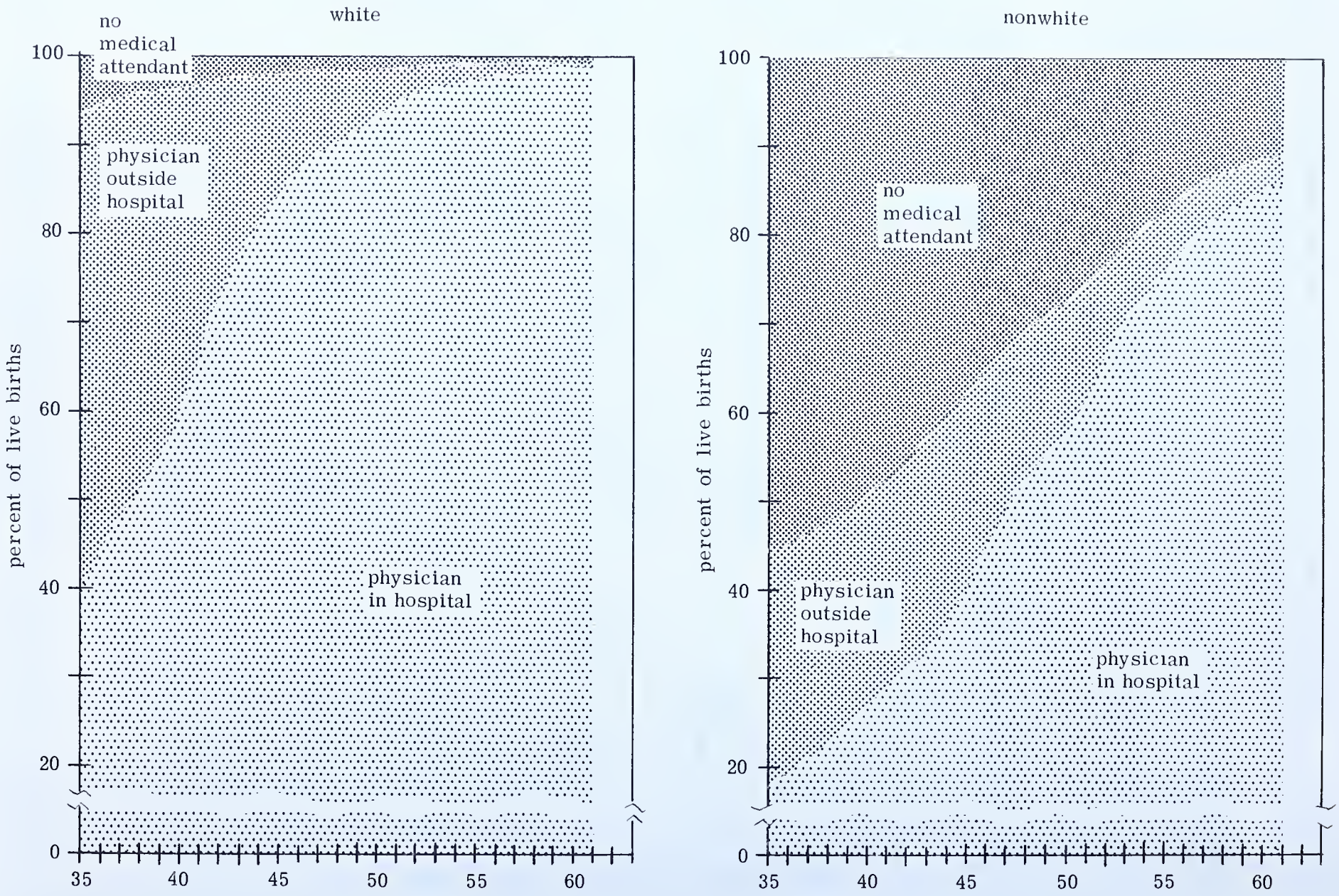
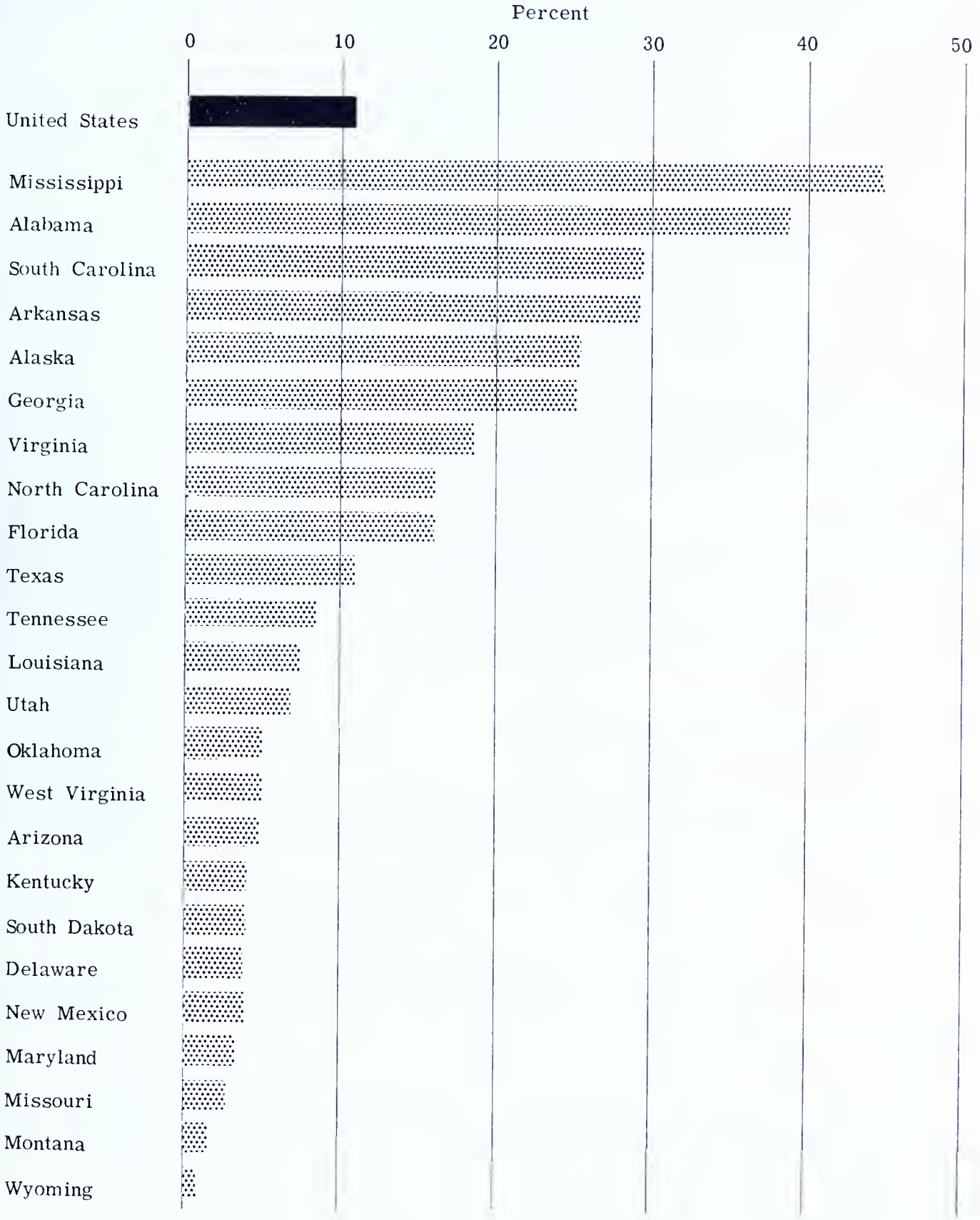


Chart 3 LIVE BIRTHS TO NONWHITE MOTHERS UNATTENDED BY A PHYSICIAN, 1961, AS A PERCENT OF LIVE BIRTHS TO NONWHITE MOTHERS

States having 1% or more unattended. By place of residence.



In prospect are increases in the annual numbers of women of child bearing age (15-44 years) due to the high fertility rates of the post-war period in the 1940's. Women in the 15-44 year age group numbered an estimated 34.1 million in 1960. According to Bureau of the Census estimates (2) their number will increase to 38.9 million in 1965, and to 42.2 million in 1970. Estimates for later years are as follows:

| Year | Estimated number of women, 15-44 years (in thousands) |
|---|---|
| 1960 | 34,141 |
| 1963 | 37,792 |
| 1965 | 38,917 |
| 1970 | 42,188 |
| 1975 | 46,536 |
| 1980 | 51,728 |

The increasing size of the child bearing population, will be reflected in a rising annual number of births, unless accompanied by a major and sustained decrease in average annual age-specific fertility levels.

Assuming fertility levels somewhat lower than prevailed in 1960-63 (Series B, Bureau of the Census projections), the projected number of births, would reach 4.72 million in 1969-70, the 5 million mark in 1971-72, and 6 million in 1979-80. Assuming still further reduction in fertility levels, (Series C), the 5 million mark would be reached a half decade later, 1976-77, and 5.3 million in 1979-80.

## National Infant Mortality Rate

In 1961, the infant mortality rate for the country as a whole was 25.3 per 1,000 live births. According to provisional figures for the 12 months ending March, 1964, the rate has continued at nearly this level, being 24.7.

The rate in 1961 was 2.7 percent below the 1960 rate, 26.0, and marks the lowest national infant mortality rate so far attained.

For white infants the reduction in rate in 1961 amounted to 2.2 percent, from 22.9 to 22.4 per 1,000, the same rate of reduction as the annual average in the period 1950-57.

For nonwhite infants the relative reduction in rate was 5.8 percent, from 43.2 in 1960 to 40.7, and more rapid than in preceding years of the 1950's. Despite these recent reductions in rate for nonwhite infants, the relative excess in mortality of these infants as compared with the white group has not been reduced. In 1951 the national rate for nonwhite infants was 74 percent higher than for white; in 1961, 82 percent higher.

Chart 4 INFANT MORTALITY, BY AGE: UNITED STATES, 1961

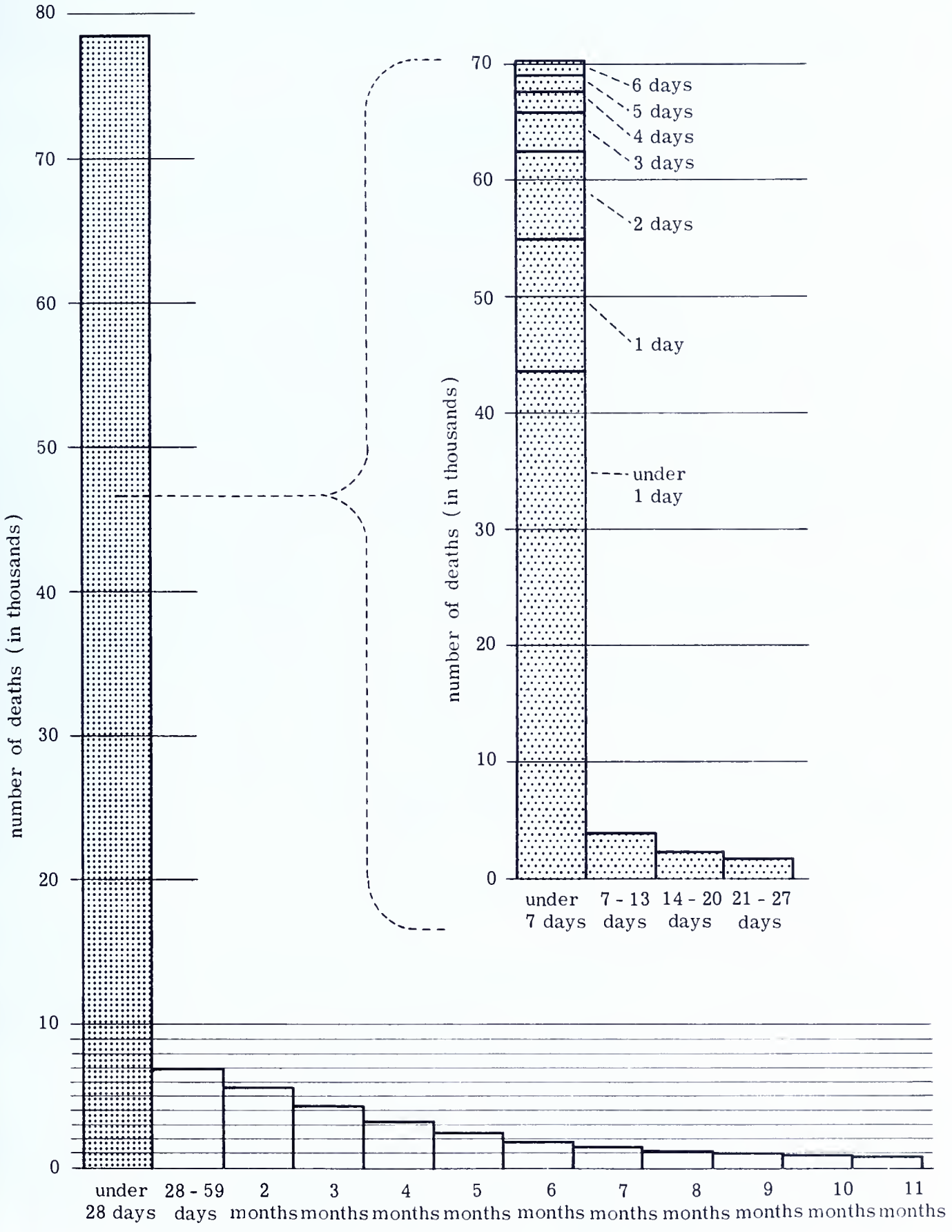
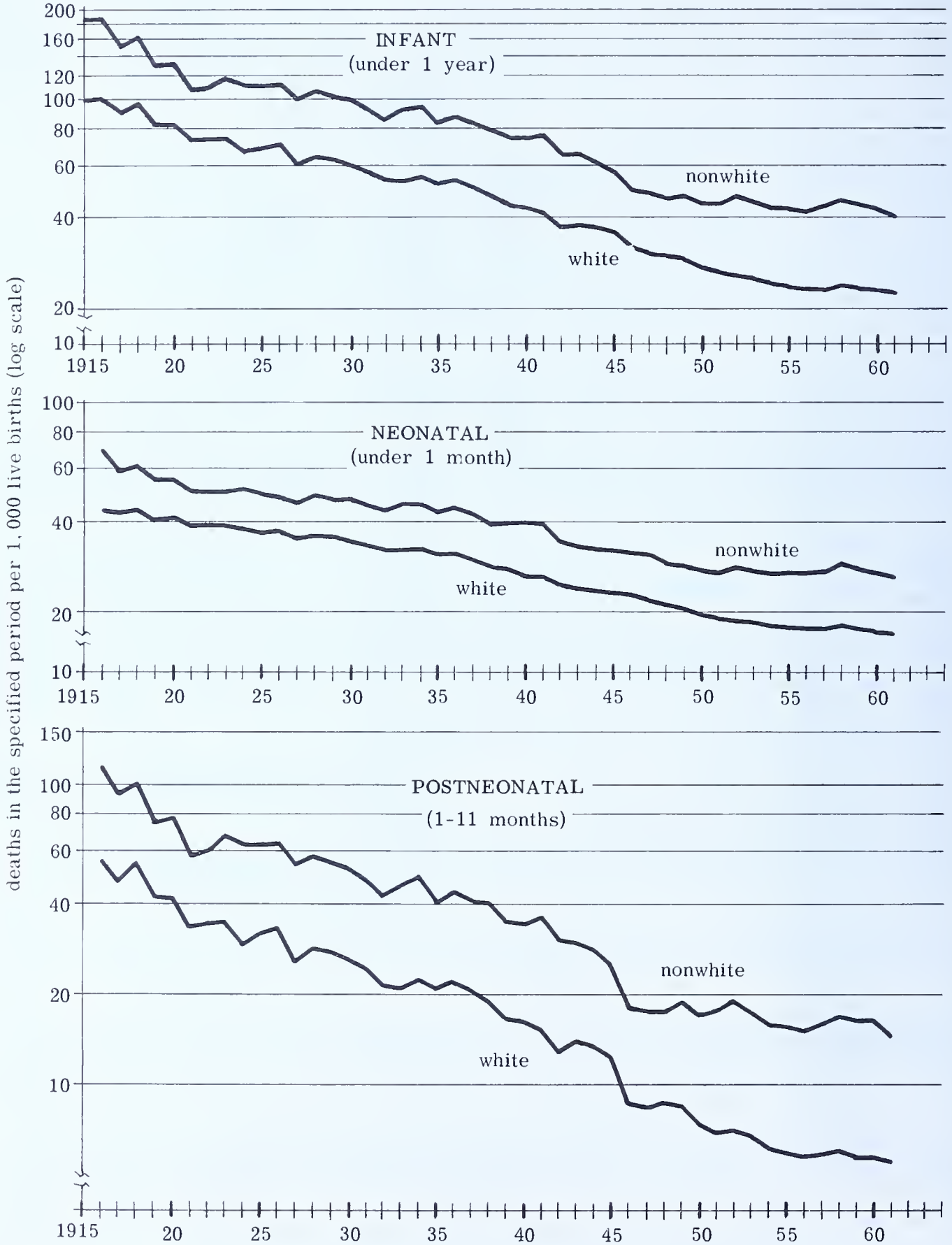


Chart 5 MORTALITY RATE OF WHITE AND OF NONWHITE INFANTS, BY AGE: UNITED STATES, 1915-1961 (birth registration area)



Infant mortality, by age and color for the United States, 1915-61, is shown in table 6. Annual percentage change in rate since 1950, for the United States as a whole, county groupings, and selected detailed ages is shown for total infants in table 14, for white infants in table 14a, and for nonwhite infants in table 14b.

Trends of the national infant mortality rate, 1915-1961 for white and nonwhite infants respectively are shown in chart 5, where it can be seen that the present day mortality experience of nonwhite infants is about that of twenty years ago in the white group, in the first year as a whole, as well as in the neonatal period (under 28 days), and in later infancy (1-11 months).

Nearly 3 out of 4 infant deaths (72.7%), in 1961 occurred in the neonatal period, and 2 out of 5 (40.7%) before one day of age.

Following increases in the neonatal mortality rate in 1957 and 1958, the rate has been reduced in subsequent years about as rapidly as in the period 1950-57, when the annual percent decrease was 1.1 percent. The neonatal rate in 1961 was 18.4, for white infants 16.9, and for nonwhite 26.2, or 55 percent higher. The excess in nonwhite neonatal mortality was marked on the first day of life, and then again at the end of the first week (3-6 days) and in the remaining weeks of the first month (7-27 days).

Postneonatal mortality (1-11 months) in 1961 in the country as a whole was 6.9 per 1,000, a rate which characterized the metropolitan counties of the United States about 10 years earlier. Progress in prevention in this age group, since the upward swing in rate in 1957-58, has been uneven but approximating the pace of the early 1950's (1950-57, -3.3 percent annually). The death rate among nonwhite infants in this age group, was over two and one half times that of white infants, 14.5 as compared with 5.5 per 1,000. In nonmetropolitan counties, that is to say those without cities as large as 50,000 population, the postneonatal rate for nonwhite infants reached 20.9 per 1,000, about three and one third times higher than the rate for white infants in these areas (6.2 per 1,000).

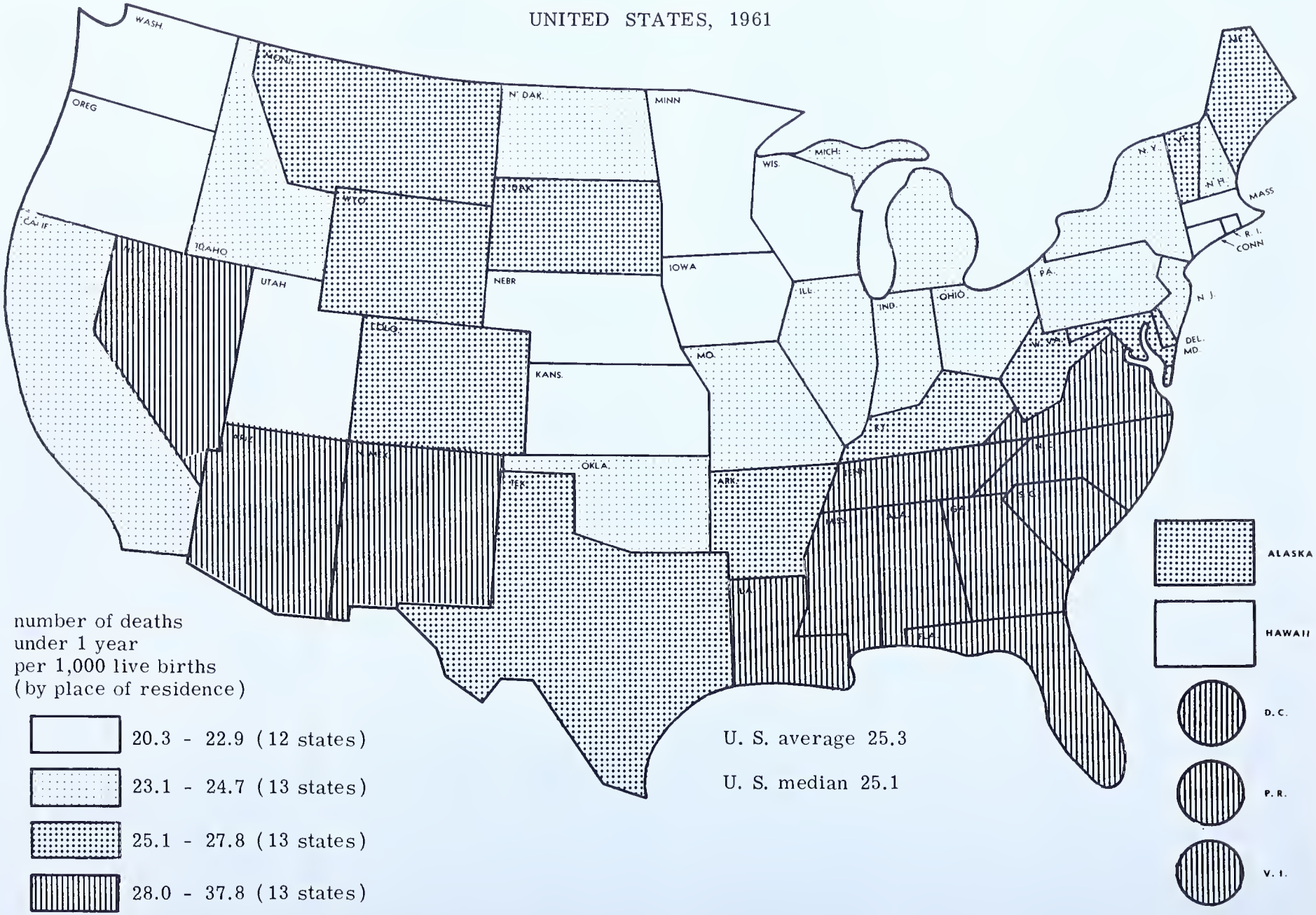
## State Infant Mortality Rates

The number of infant deaths in each State in 1961 and rate per 1,000 live births are shown, by color group, in table 9. Rates ranged from the low in Utah at 20.3 to 37.8 in Mississippi.

The position of each State relative to quartiles of the infant mortality rate is illustrated in chart 6. Thirty four States showed minor decreases in rate from 1960. In eight of these the reduction reached statistical significance. Thirteen States had higher rates in 1961 than in 1960 but not enough so for significance. Four other States recorded no change in rate in 1960-61. An evaluation of annual change in State rate in 1961 from 1960 and in 1962 from 1961 is given in table B.

Chart 6 INFANT MORTALITY RATE:

UNITED STATES, 1961




number of deaths
under 1 year
per 1,000 live births
(by place of residence)

- 20.3 - 22.9 (12 states)
- 23.1 - 24.7 (13 states)
- 25.1 - 27.8 (13 states)
- 28.0 - 37.8 (13 states)

U. S. average 25.3

U. S. median 25.1

Table B: INFANT MORTALITY RATE: UNITED STATES, EACH STATE AND SPECIFIED AREAS 1960, 1961, AND 1962

(By place of residence)

| STATE | RATE PER 1,000 LIVE BIRTHS | | | PERCENT CHANGE | |
|---|---|---|---|---|---|
| | 1962 | 1961 | 1960 | 1962 from 1961 | 1961 from 1960 |
| UNITED STATES[1]-- | 25.3 | 25.3 | 26.0 | 0 | **-2.7 |
| Alabama---------- | 30.8 | 31.1 | 32.4 | -1.0 | -4.0 |
| Alaska---------- | 34.2 | 37.0 | 40.5 | -7.6 | -8.7 |
| Arizona---------- | 28.5 | 30.6 | 31.9 | -6.9 | -4.1 |
| Arkansas---------- | 28.8 | 27.5 | 27.4 | +4.7 | +0.4 |
| California---------- | 22.9 | 23.3 | 23.3 | -1.7 | 0 |
| Colorado---------- | 25.2 | 26.2 | 27.5 | -3.8 | -4.7 |
| Connecticut---------- | 22.7 | 22.3 | 21.1 | +1.8 | +5.7 |
| Delaware---------- | 21.5 | 26.2 | 23.8 | *-17.9 | +10.1 |
| District of Columbia- | 34.9 | 35.6 | 36.4 | -2.0 | -2.2 |
| Florida---------- | 28.5 | 28.9 | 29.7 | -1.4 | -2.7 |
| Georgia---------- | 30.1 | 29.4 | 33.0 | +2.4 | **-10.9 |
| Hawaii---------- | 20.8 | 21.7 | 23.2 | -4.2 | -6.5 |
| Idaho---------- | 24.1 | 23.1 | 22.9 | +4.3 | +0.9 |
| Illinois---------- | 24.0 | 24.3 | 25.0 | -1.2 | -2.8 |
| Indiana---------- | 23.2 | 24.0 | 23.9 | -3.3 | +0.4 |
| Iowa---------- | 19.8 | 20.6 | 21.9 | -3.9 | -5.9 |
| Kansas---------- | 22.3 | 22.1 | 22.1 | +0.9 | 0 |
| Kentucky---------- | 26.9 | 27.8 | 27.9 | -3.2 | -0.4 |
| Louisiana---------- | 31.3 | 30.3 | 32.0 | +3.3 | *-5.3 |
| Maine---------- | 25.3 | 25.3 | 25.5 | 0 | -0.8 |
| Maryland---------- | 26.8 | 25.7 | 27.3 | +4.3 | -5.9 |
| Massachusetts-------- | 21.8 | 21.6 | 21.6 | +0.9 | 0 |
| Michigan---------- | 24.0 | 23.9 | 24.1 | +0.4 | -0.8 |
| Minnesota---------- | 20.9 | 22.2 | 21.6 | -5.9 | +2.8 |
| Mississippi---------- | 40.0 | 37.8 | 41.6 | *+5.8 | **-9.1 |
| Missouri---------- | 25.4 | 24.7 | 24.7 | +2.8 | 0 |
| Montana---------- | 25.9 | 25.6 | 25.0 | +1.2 | +2.4 |
| Nebraska---------- | 20.8 | 22.8 | 21.9 | -8.8 | +4.1 |
| Nevada---------- | 29.7 | 28.3 | 30.1 | +4.9 | -6.0 |
| New Hampshire-------- | 22.1 | 24.4 | 23.6 | -9.4 | +3.4 |
| New Jersey---------- | 23.8 | 23.6 | 24.6 | +0.8 | -4.1 |
| New Mexico---------- | 30.0 | 29.6 | 33.2 | +1.4 | **-10.9 |
| New York---------- | 24.7 | 23.7 | 24.1 | **+4.2 | -1.7 |
| North Carolina------- | 30.5 | 30.7 | 31.7 | -0.7 | -3.2 |
| North Dakota--------- | 22.6 | 23.2 | 24.8 | -2.6 | -6.5 |
| Ohio---------- | 22.8 | 23.1 | 24.0 | -1.3 | *-3.8 |
| Oklahoma---------- | 23.8 | 24.0 | 25.5 | -0.8 | -5.9 |
| Oregon---------- | 21.9 | 22.9 | 23.2 | -4.4 | -1.3 |
| Pennsylvania--------- | 24.0 | 23.6 | 24.5 | +1.7 | *-3.7 |
| Puerto Rico[2]--------- | 41.7 | 41.5 | 43.3 | +0.5 | -4.2 |
| Rhode Island--------- | 25.5 | 22.5 | 23.3 | +13.3 | -3.4 |
| South Carolina------- | 31.5 | 32.4 | 34.3 | -2.8 | -5.5 |
| South Dakota--------- | 25.3 | 25.1 | 28.1 | +0.8 | -10.7 |
| Tennessee---------- | 28.7 | 29.2 | 29.4 | -1.7 | -0.7 |
| Texas---------- | 27.1 | 26.7 | 28.9 | +1.5 | **-7.6 |
| Utah---------- | 19.7 | 20.3 | 19.6 | -3.0 | +3.6 |
| Vermont---------- | 22.7 | 27.2 | 24.1 | -16.6 | +12.9 |
| Virgin Islands[2]------ | 29.1 | 42.7 | 35.6 | -31.9 | +19.9 |
| Virginia---------- | 29.2 | 28.0 | 29.8 | +4.3 | *-6.1 |
| Washington---------- | 22.8 | 22.7 | 23.4 | +0.4 | -3.0 |
| West Virginia-------- | 26.5 | 26.7 | 25.5 | -0.8 | +4.7 |
| Wisconsin---------- | 20.7 | 22.7 | 21.8 | **-8.8 | +4.1 |
| Wyoming---------- | 30.3 | 27.0 | 28.2 | +12.2 | -4.3 |

[1] Excludes Puerto Rico and Virgin Islands.
[2] By place of occurrence.
* Signifies statistically significant change; ** a highly significant change.



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Average annual State rates in each of two four year periods, 1958-61 and 1954-57, are shown for infant, neonatal and postneonatal mortality, by color in tables 10-12. Average State rates in 1958-61 for total infants are shown by quartile groupings in Chart 7. The entire southern tier of States together with South Dakota, Wyoming, Colorado, and Nevada had higher rates than median, 25.2 for this period.

In the lower half of the same chart are shown State percentage changes in average rate in 1958-61 from average in 1954-57. The United States rate was reduced 0.4 percent, while 10 States, and Puerto Rico and Virgin Islands also had significant reductions in infant death rates (California, Arizona, New Mexico, Colorado, Texas, Kansas, Indiana, Oklahoma, Ohio, and Kentucky).

In eight areas the average infant mortality rate in 1958-61 was significantly higher than in the preceding four year period, namely in New York, District of Columbia, North Carolina, South Carolina, Georgia, Tennessee, Mississippi, and Louisiana.

The four-year periods of experience made feasible comparisons among States of age and color specific rates, as an indication of what has been accomplished in lowering death rates of newborn white and nonwhite infants, and rates for older infants (1-11 months) in the white and nonwhite groups.

For the nation as a whole, mortality early and in later infancy of white infants was significantly reduced, while that of the newborn nonwhite infant group was not and for nonwhite infants in the postneonatal period (1-11 months) was significantly increased.

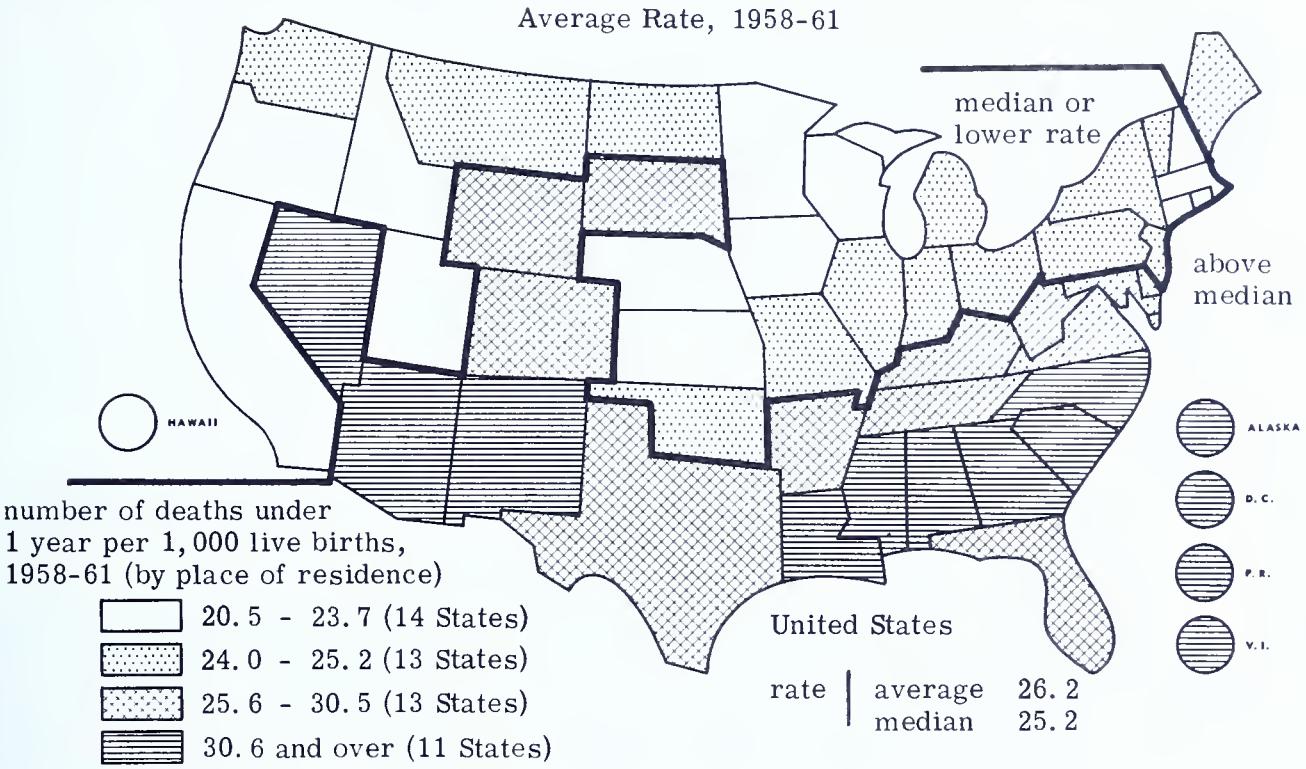
Fourteen States made no significant gains in reducing neonatal or postneonatal mortality either in the white or nonwhite infant groups, in 1958-61 as compared with 1954-57 (Oregon, New Hampshire, Vermont, Utah, Maine, Pennsylvania, Iowa, Delaware, Idaho, Minnesota, Kansas, North Dakota, Maryland and Connecticut).

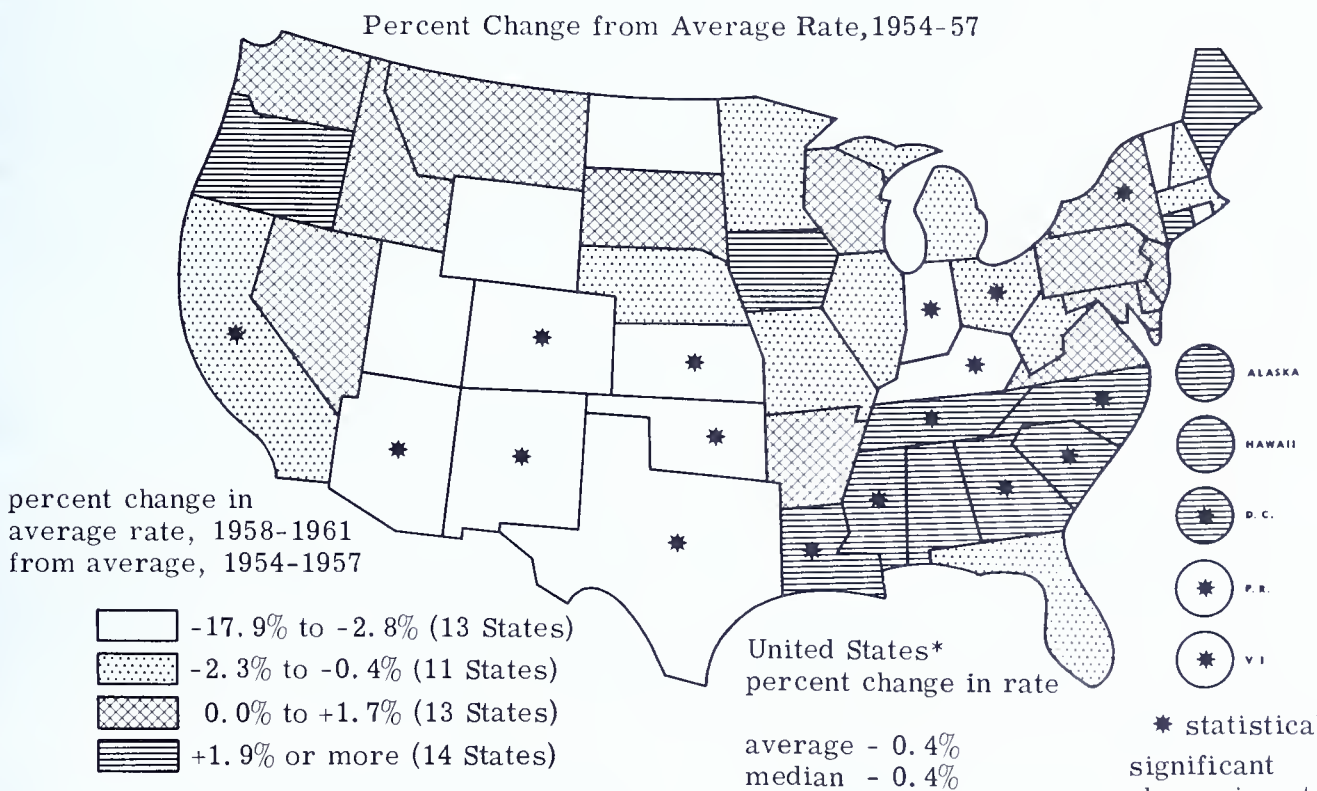
Eleven other States had higher rates in 1958-61 than in 1954-57 for late infancy in the nonwhite group, and among these same States, three also had higher neonatal rates for nonwhite infants in 1958-61 than 1954-57, while two had in addition, increases in neonatal rates among white infants. The 11 States were South Carolina, Tennessee, Virginia, Alabama, Georgia, Arkansas, New York, Mississippi, Louisiana, North Carolina, District of Columbia. Of these, Mississippi, Louisiana, and North Carolina were the States which also had significantly higher neonatal mortality rates for nonwhite infants in 1958-61 than earlier, while North Carolina and District of Columbia experienced increase in the neonatal death rate for white infants as well as for nonwhite infants in the postneonatal period.

No State succeeded in reducing the infant death rate in 1958-61 as compared with 1954-57 in both the neonatal and postneonatal periods for nonwhite as well as white infants.

In 20 States significant reduction in death rate was confined to a single age group (neonatal or postneonatal) of a single color group (white or nonwhite).

# INFANT MORTALITY




*Fifty States and District of Columbia, 1960 and 1961. Alaska, included from 1959, and Hawaii from 1960.

### Neonatal Rate Reduced for White Infants

Massachusetts, Indiana, California.

### Postneonatal Rate Reduced for White Infants

Michigan, Missouri, Ohio, Colorado, and Hawaii.

### Neonatal Rate Reduced for Nonwhite Infants

Illinois, Nevada, West Virginia.

### Postneonatal Rate Reduced for Nonwhite Infants

Nebraska, Wyoming, New Jersey, Wisconsin, Florida, Washington, Montana, Alaska, South Dakota.

Four States made reductions in both neonatal and postneonatal mortality of white infants (New Mexico, Oklahoma, Texas, and Kentucky) while a single State, Arizona, reduced the mortality of nonwhite infants in these two age groups. Three of these States, New Mexico, Arizona and Oklahoma made consistent advances in the postneonatal period for white and nonwhite infants.

The differences among States in infant mortality rate are to some extent a reflection of per capita income position. In 1960-61, for example, the third of States (17) with lowest per capita income had as a group an excess in death rate of 17 percent, over the national rate at 25.7 per 1,000 for the biennium. For the same group of States, the rate was 51 percent higher than in the State with lowest infant death rate, Utah, where the rate was 20 per 1,000 in 1960-61. States (17) in the middle per capita income range had a rate for the group which was 3 percent below national average, while States (17) in the high per capita income category had a group rate about 7 percent below the national rate.

| STATES GROUPED BY PER CAPITA INCOME 1960-61 | Infant mortality rate per 1,000 live births 1960-61 | PERCENT DEVIATION FROM | |
|---|---|---|---|
| | | United States rate | Lowest State rate (Utah 20.0) 1960-61 |
| UNITED STATES---------- | 25.7 | ... | +28.5 |
| High per capita income (17 States)------ | 24.0 | -6.6 | +20.0 |
| Middle per capita income (17 States)---- | 25.0 | -2.7 | +25.0 |
| Low per capita income (17 States)------- | 30.1 | +17.1 | +50.5 |

## Infant Mortality in Urban and Rural Areas in Metropolitan and Nonmetropolitan Counties

Annual infant mortality rates for broad age groups (neonatal and postneonatal) in the urban and rural areas of metropolitan and nonmetropolitan counties, 1950-1961 are shown by color group in tables 13, 13a and 13b. Percent change in rate, 1961 from 1960 and during the 1950's, is given in terms of comparisons of rate in 1960 with 1955, in 1955 with 1950, and in 1960 versus 1950.

Considering the first year as a whole, the infant death rate since 1950 has been lowest in rural places (under 2,500 population) in the metropolitan counties, those with a city at least as large as 50,000 population and certain other counties.

In 1961, the rural rate in metropolitan counties was 22.0 per 1,000, a reduction since 1950 of 15 percent, as compared with the National 1961 rate at 25.3, with an 11 percent reduction in the same period. In rural parts of other counties, nonmetropolitan, the infant death rate has been about 20 percent higher than in the rural areas of metropolitan counties.

| YEAR | RATE PER 1,000 LIVE BIRTHS TO RURAL RESIDENTS | | Percent excess of nonmetropolitan |
|---|---|---|---|
| | Metropolitan counties | Nonmetropolitan counties | |
| 1961---------- | 22.0 | 26.8 | 22% |
| 1960---------- | 22.5 | 28.0 | 24% |
| 1955---------- | 22.9 | 27.9 | 22% |
| 1950---------- | 26.4 | 32.0 | 21% |

Throughout the 1950's, infant populations in urban places and cities and towns, generally have had somewhat lower survival rates than those in the rural areas of metropolitan counties. In 1961 the infant death rate in urban places of metropolitan counties was 25.0, of nonmetropolitan counties 27.2, in contrast to the rate of 22.0 for rural parts of the metropolitan counties.

It is of interest to note that differentials in mortality according to urbanization do not follow the same pattern throughout infancy. In the neonatal period for both white and nonwhite infants mortality levels throughout the 1950's and through 1961 were lower for rural infants than for infants born to urban residents, regardless of type of county group.

Relatively low neonatal rates of the rural areas in nonmetropolitan counties may reflect less complete reporting of certain very early deaths than in cities and rural sections of the metropolitan counties.

On the other hand in the postneonatal period more favorable rates for survival prevailed for infants (1-11 months) in urban and rural parts of

metropolitan counties, while the highest death rates late in infancy were in urban and rural places in the nonmetropolitan counties. These differences raise questions as to relative availability and utilization of health facilities

Table C

| YEAR | DEATHS UNDER 28 DAYS PER 1,000 LIVE BIRTHS | | | |
|---|---|---|---|---|
| | Rural | | Urban | |
| | Metropolitan counties | Other counties | Metropolitan counties | Other counties |
| 1961---------- | 16.2 | 17.7 | 18.9 | 19.9 |
| 1960---------- | 16.4 | 18.1 | 19.3 | 20.2 |
| 1959---------- | 16.0 | 18.3 | 20.1 | 20.2 |
| 1958---------- | 16.8 | 18.5 | 20.5 | 20.5 |
| 1957---------- | 16.1 | 17.9 | 20.2 | 20.5 |
| 1956---------- | 15.9 | 17.9 | 19.8 | 20.6 |
| 1955---------- | 16.8 | 18.2 | 19.7 | 21.0 |
| 1954---------- | 16.7 | 18.0 | 19.7 | 21.1 |
| 1953---------- | 16.8 | 19.0 | 19.8 | 21.9 |
| 1952---------- | --- | --- | --- | --- |
| 1951---------- | --- | --- | --- | --- |
| 1950---------- | 18.2 | 20.0 | 20.2 | 24.0 |

and health services in outlying counties without an urban center as large as 50,000 population.

The postneonatal mortality rate for infants in rural communities of the metropolitan counties was decreased by 26 percent between 1950 and 1960, the most rapid deduction in any of these rates, while reduction in the postneonatal rate in urban communities of these counties has been negligible (an increase of 3.2 percent in 1960 from 1950, and a 6.2 percent drop in 1961 from the 1960 rate).

Risks are particularly high in the postneonatal period for nonwhite infants in nonmetropolitan counties, where the rate for rural areas was 22.1 per 1,000 in 1961, and for urban, 18.3. In the same counties, the postneonatal rate for white infants in 1961 in rural areas was 6.5, and in urban areas, 5.7 per 1,000. Between 1950 and 1960, these rates for white infants were reduced by 29.6 percent and 31.0 percent respectively. In the same period the postneonatal rate for nonwhite infants in the rural areas of these counties rose 12.5 percent, while in urban areas the reduction did not exceed 1.4 percent. In 1961, however, reduction from the high rates recorded in 1960 averaged about 12 percent in rural as well as urban places of the nonmetropolitan counties.

Table D

| YEAR | DEATHS, 1-11 MONTHS PER 1,000 LIVE BIRTHS | | | |
|---|---|---|---|---|
| | Metropolitan Counties | | Other Counties | |
| | Rural | Urban | Rural | Urban |
| 1961---------- | 6.0 | 6.1 | 9.1 | 7.3 |
| 1960---------- | 6.1 | 6.5 | 9.9 | 7.7 |
| 1959---------- | 5.8 | 6.9 | 9.6 | 7.9 |
| 1958---------- | 6.2 | 6.6 | 10.1 | 8.1 |
| 1957---------- | 5.8 | 6.4 | 9.5 | 8.0 |
| 1956---------- | 5.7 | 6.2 | 9.3 | 7.7 |
| 1955---------- | 6.1 | 6.0 | 9.7 | 8.1 |
| 1954---------- | 6.5 | 6.2 | 9.9 | 8.2 |
| 1953---------- | 7.3 | 6.4 | 11.0 | 9.5 |
| 1952---------- | --- | --- | --- | --- |
| 1951---------- | --- | --- | --- | --- |
| 1950---------- | 8.2 | 6.3 | 12.0 | 9.8 |

## Selected Large Cities

During the 1950's, infant mortality in urban places of the metropolitan counties decreased in rate more slowly than other urban areas; -2.7 percent reduction in 1960 from 1950, as compared with -17.5 percent in the urban areas of nonmetropolitan counties, and -11.0 percent for the United States rate. Many cities experienced a significant increase in the infant mortality rate for residents. Infant mortality rates by age and color are shown in tables 15, 16, and 17, for the 10 largest cities of the United States (1960), for the years 1950, 1955, 1960, and 1961, with percent change in rate 1960 and 1955 from 1950, 1960 from 1955, and 1961 from 1960.

In 1961, the infant death rate in all but one of these cities (Houston) was higher than that of the respective State, and the excess in city rates was evident in the postneonatal (1-11 months) as well as the neonatal period, except for Los Angeles where the postneonatal rate (5.6) was below State average (6.0).

In 7 of the 10 cities, neonatal, and total infant death rates in 1961 were higher than in 1950. The exceptions were Los Angeles, Philadelphia, and Houston. Philadelphia was distinguished in having 1961 rates throughout infancy which were below those prevailing there in 1950. An excess in 1961 over 1950 limited to postneonatal mortality characterized Los Angeles and Houston.

Table E

| AREA | RATE PER 1,000 LIVE BIRTHS | | | | | |
|---|---|---|---|---|---|---|
| | Under 1 year | | Under 28 days | | 1-11 months | |
| | 1961 | 1950 | 1961 | 1950 | 1961 | 1950 |
| New York | 25.7 | 24.9 | 19.4 | 19.2 | 6.2 | 5.7 |
| Chicago | 27.7 | 25.4 | 19.5 | 18.9 | 8.3 | 7.1 |
| Los Angeles | 23.7 | 24.8 | 18.1 | 20.1 | 5.6 | 4.7 |
| Philadelphia | 29.8 | 31.1 | 23.0 | 23.5 | 6.8 | 7.6 |
| Detroit | 27.8 | 26.9 | 21.6 | 20.2 | 6.2 | 6.7 |
| Houston | 26.3 | 28.7 | 18.2 | 23.6 | 8.1 | 5.1 |
| Baltimore | 32.5 | 28.0 | 24.7 | 20.3 | 7.8 | 7.7 |
| Cleveland | 27.9 | 25.6 | 22.4 | 19.5 | 5.5 | 6.1 |
| District of Columbia | 35.6 | 30.4 | 27.2 | 24.5 | 8.3 | 5.9 |
| St. Louis | 31.4 | 25.8 | 23.5 | 19.2 | 7.9 | 6.6 |
| United States | 25.3 | 29.2 | 18.4 | 20.5 | 6.9 | 8.7 |
| Urban | 25.5 | 28.4 | 19.1 | 21.2 | 6.4 | 7.2 |
| Metropolitan | 25.0 | 26.5 | 18.9 | 20.2 | 6.1 | 6.3 |
| Nonmetropolitan | 27.2 | 33.8 | 19.9 | 24.0 | 7.3 | 9.8 |

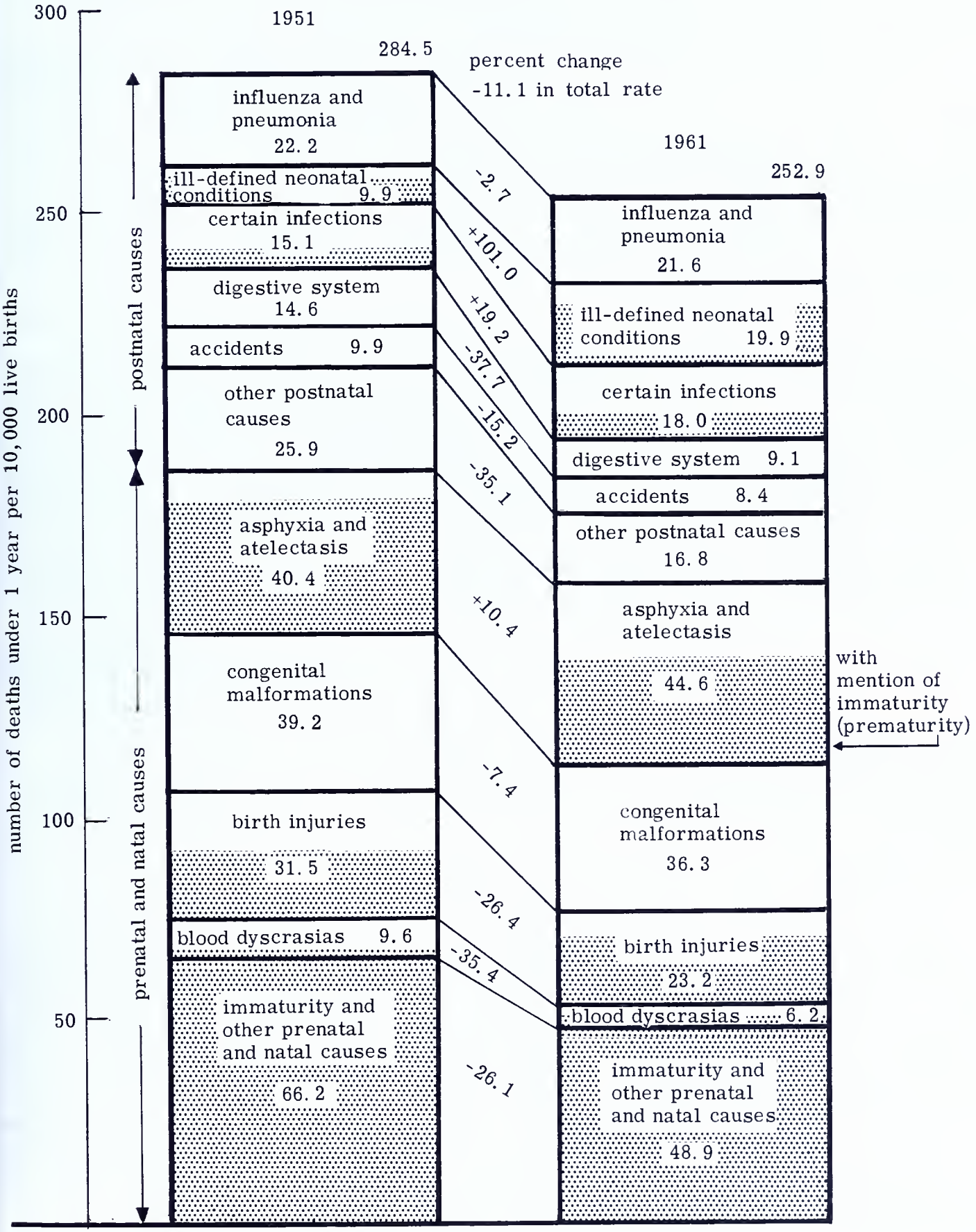
## Causes of Infant Mortality

The main causes of infant mortality in 1961 and in 1951 are shown in table 7 and chart 8. In table 7 prenatal and natal causes refer to conditions or precursors presumed to be present before or during birth. Postnatal causes include circumstances and morbidities arising presumably after birth.

The average reduction in infant death rate between 1951 and 1961 was 11 percent, which seems moderate in view of the fact that a number of causes of long standing importance decreased much more sharply. In this group were:

| | Percent reduction in rate 1961 from 1951 | Rate per 10,000 1961 |
|---|---|---|
| Birth injuries (760-761) | -26.4 | 23.2 |
| Blood dyscrasias (770-771) | -35.4 | 6.2 |
| Diarrhea of the newborn (764) | -44.5 | 1.0 |
| Other diseases of the digestive system (530-587) | -37.7 | 9.1 |
| Accidents (E800-E962) | -15.2 | 8.4 |
| Infective and parasitic diseases (001-019, 020, 030-044, 045-052, 054-138) | -68.1 | 2.2 |

Chart 8 INFANT MORTALITY RATE, MAIN CAUSES BY INTERNATIONAL LISTS (SIXTH AND SEVENTH REVISIONS): UNITED STATES 1951 AND 1961



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Offsetting the reductions in the causes just mentioned were substantial increases in other causes which appear to correspond to some actual increases in mortality. To be mentioned here are a group of ill-defined infections:

| | Percent increase in rate 1961 from 1951 | Rate per 10,000 1961 |
|---|---|---|
| Other sepsis of newborn (765-768) | +54.5 | 1.7 |
| Other respiratory diseases (470-475, 500-527) | +46.3 | 6.0 |
| Septicemia and pyemia (053) | +80.0 | 0.9 |
| Pneumonia of newborn (763) | +10.7 | 8.3 |
| Diseases of nervous system and sense organs (330-334, 340, 398) | +13.9 | 4.1 |

The increase just mentioned in diseases of nervous system and sense organs was due almost entirely to an increase in number of deaths due to meningitis except meningococcal and tuberculous from 565 in 1951 to 876 in 1961, thus adding 311 of the 373 additional deaths attributed in 1961 to diseases of nervous system and sense organs, as compared with 1951. Jointly, the first four ill-defined infections just mentioned, and meningitis except meningococcal and tuberculous, claimed 8,120 infant lives in 1961 as compared with 5,542 in 1951. In the latter year they comprise 5.2 percent of infant deaths and in 1961, 7.6 percent. The rates per 10,000, referable to these fatal infections, in 1951 and 1961 were in summary as follows:

| | Rate per 10,000 live births | |
|---|---|---|
| | 1961 | 1951 |
| Other sepsis of newborn | 1.7 | 1.1 |
| Other respiratory diseases | 6.0 | 4.1 |
| Septicemia and pyemia | 0.9 | 0.5 |
| Pneumonia of newborn | 8.3 | 7.5 |
| Meningitis except meningococcal and tuberculous | 2.1 | 1.5 |
| Specified causes | 19.0 | 14.7 |

Increases in certain other causes may be partially explained by improvement in diagnostic reporting of cause of death in the sense of greater specificity in certifying conditions leading to death. The expected cumulative effect of such a trend in content of reporting would be gradual decrease in such categories as "immaturity unqualified" (776), symptoms and ill-defined conditions (780-795), and nutritional maladjustment (772), with allocation of larger proportions of deaths to more specific categories. Some part of the increase in postnatal asphyxia and atelectasis from 40.4 per 10,000 in 1951 to 44.6 in 1961 can presumably be so explained, relative to the decrease in the rate for immaturity unqualified which declined from 61.6 per 10,000 in 1951 to 43.6 in 1961.

Deaths attributed to congenital malformations decreased 7.4 percent in rate from 39.2 to 36.3 per 1,000, the drop possibly stemming from relatively more frequent successful management of these infants in the first year.

The sharp rate increase for "ill-defined diseases peculiar to early infancy" (773) results at least in part from a change in coding procedures for the frequent condition in the newborn infant termed "hyaline membrane."

In 1961 hyaline membrane was classified under "ill-defined diseases peculiar to early infancy" (773), but not in 1951. In the latter year the condition was classified under other respiratory diseases (527.1).

Notwithstanding the shift of hyaline membrane out of "other respiratory diseases," the latter category shows a substantial increase in rate, 46.3 percent, from 4.1 per 10,000 in 1951 to 6.0 in 1961.

## Infant Mortality in Selected Countries

Trends in infant mortality, by broad age grouping, are shown for a number of advanced countries in table 18. Countries included are those with well developed registration systems for vital records, which are said to comply generally with World Health Organization definitions pertaining to births and deaths, and which have population over 300,000 (1960). Countries are listed according to the infant mortality rate, 1959-61.[1] Average annual rates in the latter period are compared with those a decade earlier (1949-51).

Despite the existence of internationally accepted definitions, rates for different countries differ to some degree because of varying interpretation of, or compliance with, standard definitions, and due to procedural differences. Similar problems of comparability arise in area comparisons within a country among States and among cities and counties. Limitation of the comparisons here to the countries selected has reduced to some extent the effects of methodological differences, but hardly eliminated them entirely.

In the three-year period centered on 1960, Sweden, the Netherlands, and Norway had the lowest infant death rates, 16.3, 17.7, and 18.5 per 1,000, with reduction in rate since 1949-51 in the Netherlands and Norway of over one-third, and in Sweden of about one-fourth.

In general, countries which accomplished as much as 30 percent reduction in rate during the decade, maintained or improved their relative positions of 1949-51. Cases in point, in addition to the Netherlands, were Norway, Switzerland, Finland, Denmark, United Kingdom, Ireland, and Japan. For the United States, the reduction amounted to 12.5 percent, the smallest among these countries. In 1949-51 the United States infant death rate, 29.6 per 1,000 was significantly higher than rates in five other countries, thus ranking sixth, namely; Sweden (22.0), Australia (25.0), Netherlands (27.2), Norway (27.2) and New Zealand (28.4). In 1959-61, the United States rate (25.9) exceeded significantly, in addition, rates in Switzerland (21.4), Finland (21.8) and Denmark (21.9), which were essentially the same, and the closely

[1]The area differences in infant mortality rate, 1959-61, are statistically significant, except between Netherlands and Norway; among Switzerland, Finland and Denmark; between United Kingdom and New Zealand; among Ireland, Japan and Luxembourg; and between Federal Republic of Germany and Luxembourg. Data for the Netherlands are adjusted to include all live births and infant deaths (21).

similar rates in the United Kingdom (22.6), and New Zealand (23.1). Thus due to the slower pace of reduction of infant mortality, the United States rate ranked tenth in 1959-61. The lag in reducing mortality in infancy was evident in both the neonatal and postneonatal periods. The 9.7 percent reduction in the neonatal period was smallest among these countries, and likewise the 18.9 percent drop in postneonatal rate between 1959-61 and 1949-51. The United States neonatal death rate, 18.7 in 1959-61, had become significantly higher than rates in all but three of the countries listed (Luxembourg, 19.3 and Ireland, 20.7, whose rates were statistically indistinguishable; and the Federal Republic of Germany 23.3). The United States postneonatal rate in 1959-61, 7.3, ranking ninth, was significantly higher than rates in Finland (6.7), United Kingdom (6.5), and Norway (6.3) which did not differ significantly among themselves; in Australia (5.8), Denmark (5.7) and Switzerland (5.4 in 1959-60) also not differing significantly; and in the Netherlands (4.5), and Sweden (3.2).

Perinatal mortality rates are shown in table 19 for the period 1959-61, and in table 20 for 1954-56, years for which the data for fetal deaths were available for nearly all the countries.[2]

The particular perinatal period, "before, during, and just after birth," referred to in table 19, includes fetal deaths in pregnancies of 28 or more or unknown weeks in duration, and deaths of liveborn infants under 28 days of postnatal age (neonatal deaths). The perinatal rate shown in table 19 is the number of fetal deaths plus neonatal deaths per 1,000 total births (live and still).

The perinatal rate, in addition to providing a measure of outcome of pregnancy, is useful to avoid the major bias in separate neonatal and fetal death rates, stemming from varying opinions or interpretations as to presence or absence of "evidence of life" at birth. That such variation is not uncommon in the United States among different hospitals was indicated by a survey of opinions of obstetricians in 1952 (14). On the basis of 113 responding hospitals of the 173 teaching and accredited hospitals queried, less than one half reported that any "evidence of life" was the criterion used to distinguish a liveborn infant for registration purposes from a stillborn. In 68 of the hospitals duration of pregnancy, dimensions of the fetus (weight, length) and other factors were bases for decision as to whether the birth event need be reported, and if so whether "live" in result, or "fetal death."

It can reasonably be assumed that in other countries also, notwithstanding official approval of World Health Organization definitions, the categorizing of newborn as "live" or "still" often turns on other or additional criteria, than presence or absence of "evidence of life." (17)

In the half decade, 1959-61 from 1954-56, the United States reduced its perinatal rate from 31.7 to 30.5, or by 3.8 percent, the smallest relative reduction among the countries listed. Eight other countries in 1959-61, (Denmark, 29.2; Australia, 29.1 for 1959; New Zealand, 28.6; Finland, 28.3; Netherlands, 28.1; Switzerland, 27.7 for 1959-60; Sweden, 26.7 and Norway, 25.3) had significantly lower perinatal mortality than in the United States.

[2] Fetal death data were not available for 1960 and 1961 for Australia; for 1961, Switzerland; and for all years for Ireland.

For an overview of survival in the birth period through infancy, a joint rate for the perinatal and postneonatal periods is shown in table 19 for the period 1959-61, and in table 20 for the period 1954-56. The joint rate is the number of fetal plus neonatal, plus postneonatal deaths per 1,000 total births (live and still). So defined, the rate gives a picture of combined fatalities for the fetus in being born and in infancy, when pregnancy has endured 28 or more weeks, or issues in live birth.

In 1954-56, Sweden and Norway had the lowest joint perinatal - postneonatal rates recorded, namely 34.3 and 35.6 per 1,000 total births, respectively, followed by Australia, 37.1, and the Netherlands, 38.2. The United States was in fifth position with a rate of 38.9, significantly higher than rates for the countries just mentioned, but significantly lower than those in the remaining countries. By 1959-61, four of the latter (Switzerland, 1959-60; Denmark, Finland, and New Zealand), by more rapid reduction of perinatal and of postneonatal mortality, than took place in the United States, attained joint perinatal-postneonatal rates which were, with the possible exception of New Zealand, significantly lower than for the United States. Accordingly, the United States joint rate moved into eighth position from fifth; or ninth position, if New Zealand is assumed, by virtue of its more rapid reduction of the joint rate, by 8.7 percent as compared with 3.4 percent in the United States, to have reached in fact a lower mortality level, 36.9, than indicated by the United States rate, 37.6. Joint perinatal-postneonatal rates for the nine countries in question, and percent reduction in 1959-61 from 1954-56 are shown below.

Table F

| COUNTRY[1] | Joint perinatal-postneonatal rate per 1,000 total births (live and still) | | Percent reduction |
|---|---|---|---|
| | 1959-61 | 1954-56 | 1959-61 from 1954-56 |
| Sweden | 29.8 | 34.3 | 13.1 |
| Norway | 31.6 | 35.6 | 11.2 |
| [Netherlands | 32.6 | 38.2 | 14.7 |
| [Switzerland (1959-60) | 33.0 | 40.5 | 18.5 (to 1959-60) |
| [Denmark | 34.8 | 43.4 | 19.8 |
| [Finland | 34.9 | 43.9 | 20.5 |
| [Australia (1959) | 35.3 | 37.1 | 4.9 (to 1959) |
| [New Zealand | 36.9 | 40.4 | 8.7 |
| [United States | 37.6 | 38.9 | 3.4 |

[1] A bracket, signifies that the rate difference in 1959-61 between the two countries thus identified is not statistically significant.

In the majority of the countries, relative mortality levels in the perinatal period and in the postneonatal period tended to be closely similar. For example, Sweden's rate in the perinatal period, 1959-61, was next to lowest among the countries. Its postneonatal rate was lowest (3.2). The Netherlands, in addition to low perinatal mortality (28.1) in these years, ranked second lowest (4.5), following Sweden (3.2) in postneonatal mortality. Switzerland likewise had relatively low rates in the perinatal and postneonatal periods.

Other countries with consistency of relative levels of perinatal and postneonatal mortality in 1959-61 were United States, Canada, Federal Republic of Germany, Luxembourg, and Japan, all with consistently higher rates.

Norway, Finland, and New Zealand were exceptional in having relatively low perinatal mortality rates (25.3 lowest; 28.3, and 28.6, in the same order) in combination with somewhat elevated postneonatal mortality (6.3, 6.7, and 8.4 respectively). Norway's postneonatal rate, 6.3, was not significantly different from rates in United Kingdom (6.5) and Finland, but was definitely higher than in five other areas, namely, Sweden (3.2), Netherlands (4.5), Switzerland (5.4), Denmark (5.7), and Australia (5.8).

The reverse contrast, relatively high perinatal mortality rates with medium or low levels in postneonatal mortality was found in United Kingdom, and in Denmark. The perinatal rate for United Kingdom (excluding Northern Ireland), 35.6, was exceeded only by Federal Republic of Germany (38.0) and Japan (46.9). The postneonatal mortality rate, 6.5 was in a class with that of Norway (6.3) and Finland (6.7) although higher than rates for Australia (5.8), Denmark (5.7), Switzerland (5.4), Netherlands (4.5), and Sweden (3.2). Denmark's perinatal rate was upper middle range, while its postneonatal rate (5.7) was among the lowest five. (Australia, 5.8; Switzerland, 5.4; Netherlands, 4.5; and Sweden, 3.2). Australia's perinatal rate, which was for the single year 1959, was middle range, probably due in part to absence of later data, while the postneonatal rate was relatively low, 5.8, with that of Denmark, 5.7.

## Impact of Socioeconomic Factors on Infant Mortality in the United States

Early studies in cities by the Children's Bureau described the then prevailing relationships between infant mortality levels, earnings of the father, housing congestion, and various other socioeconomic and cultural factors (18). Today's situation in the blighted neighborhoods of many of our larger cities is reminiscent of these relationships.

In neighborhoods comprising the "low socioeconomic areas" of our large cities, risks to infants are often much higher than in other parts of the same cities. In one of our far western cities (Oakland), the infant death rate in census tracts classified in the "low socioeconomic area" was 27.6 in comparison with 16.1 in the "high socioeconomic area" and 23.7 for the city as a whole in 1961.[3] The "low socioeconomic area" here, in contrast to those

[3] Report from Alameda County Health Department, Oakland, California, 1961.

designated as "high" or as "medium," comprised the census tracts ranking in the lowest third on the bases of median income (1959), density of housing, percent Negro population, and percent Spanish-white population in the 1960 census. The joint perinatal-postneonatal mortality rate in the "low socioeconomic area" was 48.4 per 1,000 total births (live and still), as compared with 26.3 in the "high area". (Fetal deaths included are those of 20 or more or not stated weeks of pregnancy). The fetal death rate per 1,000 total births in the "low area", 21.4, was double that for mothers in the "high socioeconomic area".

Reports from certain other cities and from selected hospitals illustrate the coincidence of elevated mortality and morbidity in the form of prematurity, and other complications of pregnancy, in neighborhoods with relatively depressed levels of living (4).

The recent role of socioeconomic and other factors in infant and fetal mortality was summarized from an international point-of-view by the Statistical Office of the United Nations. (17).

State differences in infant mortality correlated with State per capita income of individuals were illustrated above.

At the individual county level also, infant survival is responsive to the socioeconomic climate. In the decennial census year 1960, while there were no States, and no large cities, with infant mortality rate as low as that in Sweden that year (16.5), there were a few counties in the United States with rates at this level.

Of counties in the United States with 1,000 or more live births in 1960, of which there were 678, a total of 29 recorded an infant death rate at 16.5 or less per 1,000. About 1.4 percent of live births in the United States that year were in these county health jurisdictions. Over half (16) of the 29 counties were in the upper third of States with high per capita income (1960-62); about one third (10) in States in the middle per capita income group, and 3 in States with relatively low per capita income.

Coincident with the exceptionally low infant death rates in these counties were, in many cases, relatively favorable socioeconomic circumstances. The following table gives number of the counties above or below their State average or median values in respect to, family income, unemployment, schooling, and proportion of population nonwhite.

Family income in 15 of the 29 counties was above State median and in 9 others lower by less than 10 percent. Five counties had median family income more than 10 percent below the State figure.

In all 29 counties the proportion of nonwhite population was lower than average for the State. In 15 the nonwhite population was under 1,000.

Table G: DISTRIBUTION OF 29 COUNTIES WITH 1,000 OR MORE LIVE BIRTHS AND INFANT MORTALITY RATE OF 16.5 OR LESS, 1960, RELATIVE TO RESPECTIVE STATE AVERAGE OR MEDIAN FOR SELECTED SOCIOECONOMIC CHARACTERISTICS

| | SELECTED SOCIOECONOMIC CHARACTERISTICS, 1960 CENSUS[1] | | | |
|---|---|---|---|---|
| | Median | Percent of civilian labor force unemployed | Median school year completed | Percent of total population nonwhite |
| TOTAL---------- | 29 | 29 | 29 | 29 |
| Above State average or median---------- | 15 | 8 | 18 | 0 |
| Below State average or median---------- | 14 | 21 | 11 | 29 |
| Less than 10 percent--- | 9 | ... | ... | ... |
| 10 percent or more----- | 5 | ... | ... | ... |

[1] Bureau of the Census, Population of the United States, 1960, United States Summary.

Median number of completed years of schooling was above State median in 18 of the 29 counties and percent of civilian labor force unemployed was below State average in 21.

Data for the individual 29 counties and States in which situated are given in table 21.

In contrast to these presently "low rate" counties in the United States are those with excessively high infant death rates. Of counties with 1,000 or more live births in 1960, 37 counties had infant mortality rates of 40 or more, the national rate of two decades ago, and accounted also for 1.4 percent of total live births in the United States in 1960. Viewed from the standpoint of the same socioeconomic characteristics, these "high risk" counties exhibited in the majority of cases, below State average or median family income, and schooling completed; and above State average (or median) unemployment and proportion of population nonwhite.

A listing of the 37 "high risk" counties and their respective States, according to State per capita income group (1960-62), is given in table 22. Twenty-nine of the 37 counties were in the low per capita income group of States, 6 in the middle per capita income group, and 2 in high per capita income States.

## Rising Incidence of Low Birth Weight (Prematurity)

In the United States as a whole the incidence of prematurity (birth weight 2,500 grams or less) has increased from 7.5 percent of live born infants in 1950-51 to 7.9 in 1960, 7.8 in 1961, and 8.0 in 1962. Among nonwhite infants,

Table H: DISTRIBUTION OF 37 COUNTIES WITH 1,000 OR MORE LIVE BIRTHS AND INFANT MORTALITY RATE OF 40.0 OR MORE, 1960, RELATIVE TO RESPECTIVE STATE AVERAGE OR MEDIAN FOR SELECTED SOCIOECONOMIC CHARACTERISTICS

| | SELECTED SOCIOECONOMIC CHARACTERISTICS, 1960 CENSUS[1] | | | |
|---|---|---|---|---|
| | Median family income (1959) | Percent of civilian labor force unemployed | Median school year completed | Percent of total population nonwhite |
| TOTAL---------- | 37 | 37 | 37 | 37 |
| Above State average or median---------- | 8 | 21 | 12 | 25 |
| Below State average or median---------- | 29 | 16 | 25 | 12 |
| Less than 10 percent--- | 5 | ... | ... | ... |
| 10 percent or more----- | 24 | ... | ... | ... |

[1] Bureau of the Census, Population of the United States, 1960, United States Summary.

the incidence increased from 10.7 in 1951 to 13.1 in 1960. Among white infants the incidence has hovered about 7.0 percent (7.1 percent in 1950; 7.0 in 1951; 6.8 in 1955 and 1960; 6.9 in 1961, and 7.0 in 1962). Since 1960, the number of premature or "low-weight" babies has been in the neighborhood of 325,000 as compared with 307,000 and fewer in 1955 and 1950, respectively. An increasing incidence of prematurity increases the segment of the newborn population subjected to the high fatality risk of "low-weight" infants, for whom the neonatal death rate is many times greater than for the term baby. The prematurity level tends to be higher at depressed levels of living than in medium or high socioeconomic areas, as evidenced generally by the differentials in incidence rates between nonwhite and white mothers, and between "low socioeconomic neighborhoods" and other neighborhoods in many large cities. Accompanying elevated incidence of prematurity is often a relatively high proportion of mothers receiving little or no prenatal care (4) either due to limited availability or use of existing services.

Some of the reasons found in special studies of why mothers in low-income families do not receive adequate care in pregnancy and subsequently their infants also receive inadequate care have been noted elsewhere. (5) Noteworthy are problems of patient transportation from home to centralized facilities (long distances, inconvenience, and expense); excessive eligibility and residence requirements coupled with local variation and large cash prepayments; family lack of knowledge of the importance of early and continuous care in maternity; poor health habits and ignorance of nutrition needs in maternity and infancy; and inadequacy of help from outside sources.



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As evidenced by attainment of relatively low infant death rates in urban fringe areas and in high-income and otherwise favored neighborhoods of many cities, as well as by low infant mortality rates now recorded in a number of other countries, a major reduction in the infant death toll is technically possible through the application of already existing health and medical knowledge. Because of the association of high infant mortality with low family income, poor housing, little schooling, and other traits of low income families, significant reductions in infant mortality in these families, and for the country as a whole turns upon firmer economic underpinning of family life and sustained collaborative efforts of professional and related groups to extend and improve maternal and child health and welfare services, and other essential services.

## CHILDHOOD MORTALITY

National trends of the childhood mortality rate, by broad age groupings, 1-4 years, 5-14 years, and 1-14 years, since 1900, are illustrated in chart 9.

Main causes of death among children at these ages, in 1961 in comparison with 1951 are shown in chart 10 and in table 23. The childhood mortality rate (1-14 years) showed a decrease of 29.3 percent in 1961 from the 1951 rate. Accidents other than motor vehicle were the chief cause of death in both years, although exhibiting a decline of 23.8 percent over the decade. The largest relative decrease observed was in the rate for diseases of the heart (-61.5 percent). Congenital malformation were the only main cause to show an increase (+7.1 percent) during the period. Aside from the ten major causes of childhood mortality, the mortality rate for all other causes combined, decreased 45.1 percent from 1951.

For children 5-14, the mortality rate decreased 26 percent over the period, representing a saving of an approximate 6,000 children in this age group. The greatest reduction in main causes was evidenced by diseases of the heart (68.8 percent decrease from the 1951 rate). Noteworthy were the increases in rates for malignant neoplasms (9.2 percent) and for congenital malformations (45.8 percent). Malignant neoplasms have been the leading disease grouping to which deaths of children, 5-14 years, have been attributed since about 1950.

Among younger children (1-4 years), influenza and pneumonia in 1961, as in 1951, was the leading fatal disease grouping, followed in 1961 by congenital malformations, and malignant neoplasms. The latter cause in this age group showed a 11.9 percent reduction in rate in 1961 from 1951, while the death rate from congenital malformations increased in the same period 5.3 percent.

Chart 9

CHILDHOOD MORTALITY RATE, BY AGE:

UNITED STATES, 1900-61 (death registration area)

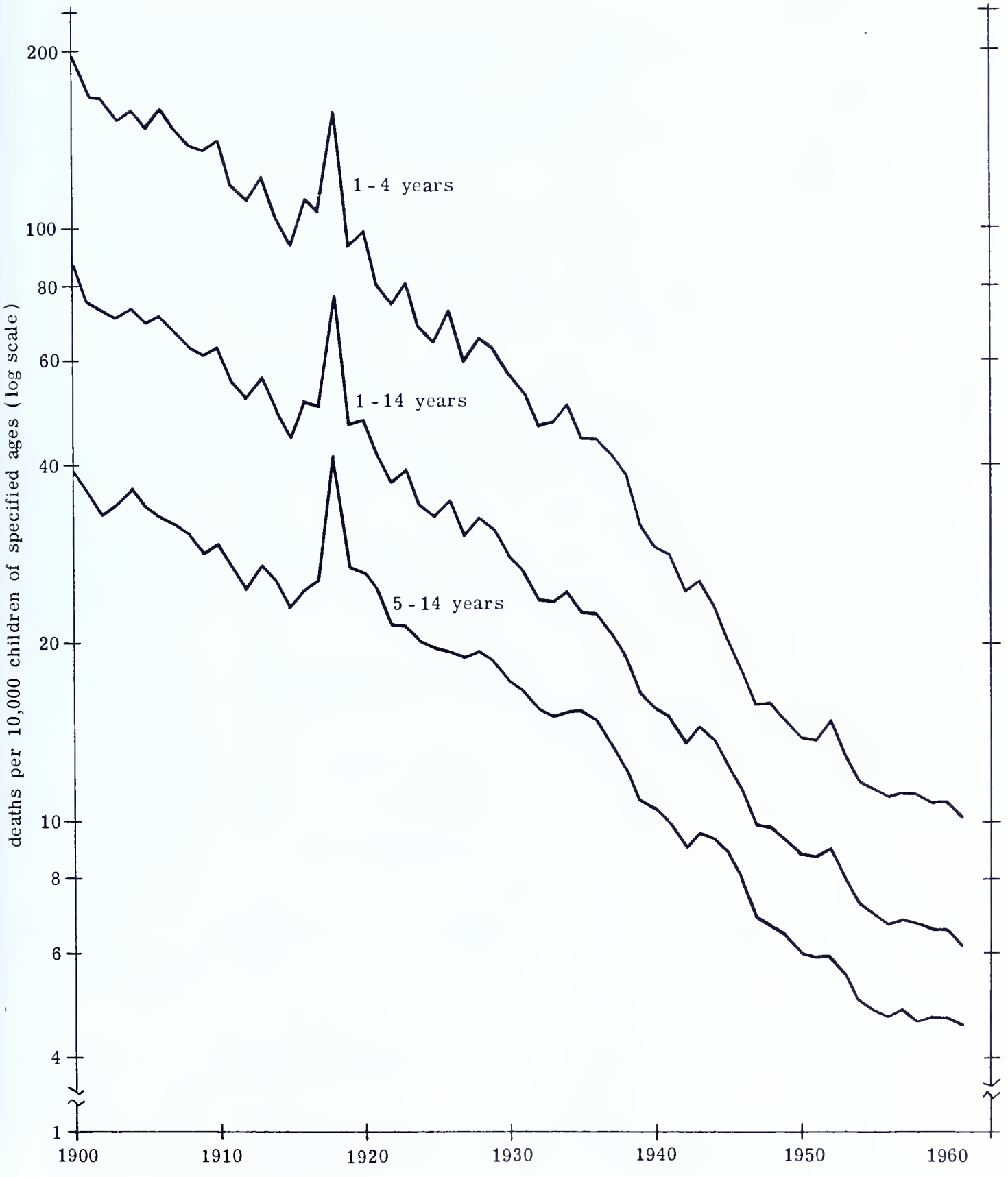
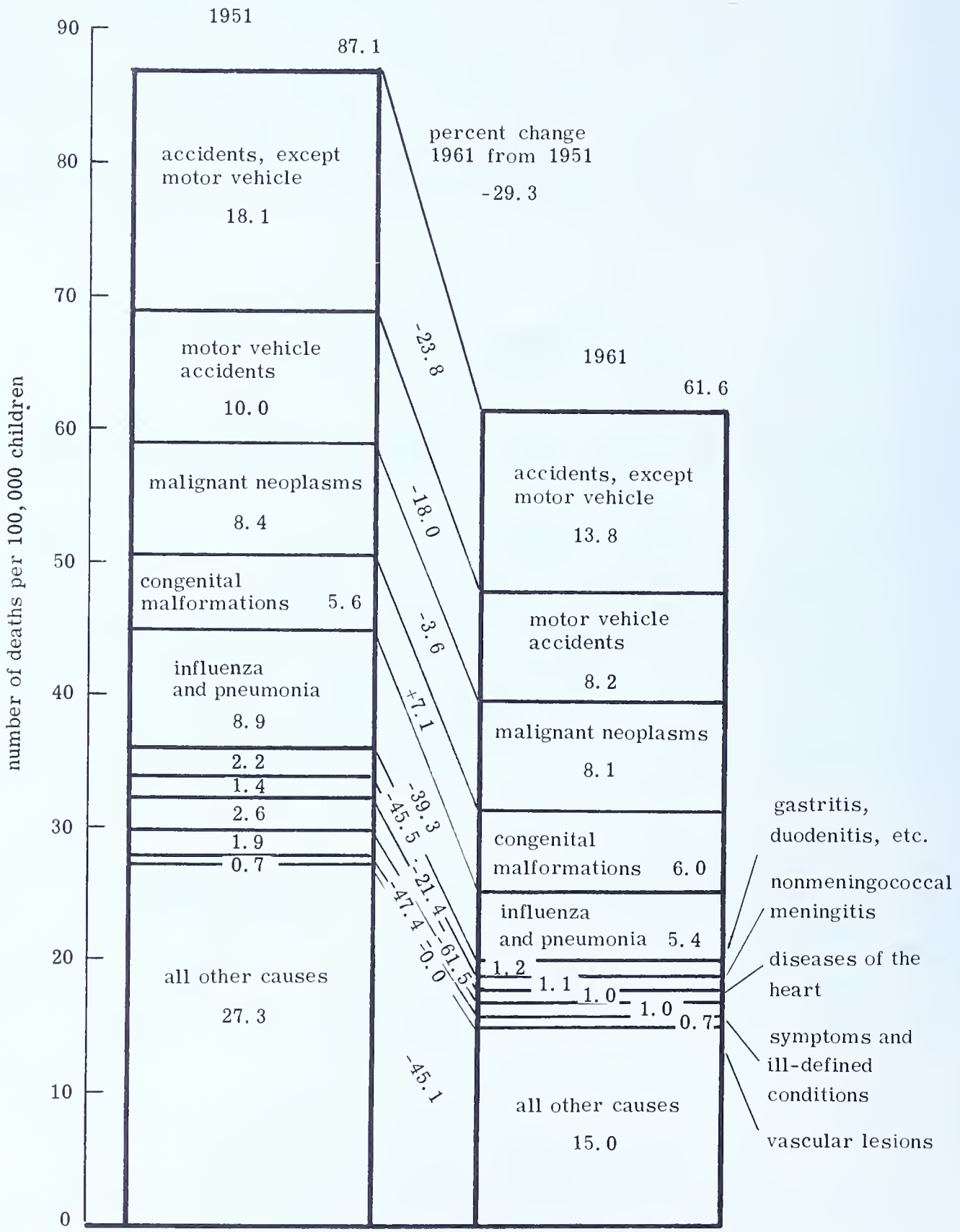


Chart 10 CHILDHOOD MORTALITY RATE, 1-14 YEARS OF AGE, MAIN CAUSES BY INTERNATIONAL LISTS (SIXTH AND SEVENTH REVISIONS): UNITED STATES, 1951 AND 1961




rates for individual causes were independently rounded

## Technical Notes

Unless otherwise noted the data in this report are those of the National Center for Health Statistics, Vital Statistics Division, Public Health Service.

Information concerning cause of death represents the opinion of the physician completing the death certificate as to the underlying cause to which the death was due. The cause so determined is classified according to categories of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Seventh Revision, (or as otherwise specified), 1955, World Health Organization.

Some of the tables and charts present data separately for white and for nonwhite groups of mothers and infants. The category white includes persons reported as white as well as Mexicans and Puerto Ricans. The nonwhite group consists here of persons reported as Negro, American Indian, Chinese, Japanese, other small nonwhite groups and persons of mixed white and nonwhite groups.

All statistics for the total United States in this report, for years prior to 1959 include 48 States and the District of Columbia. Beginning in 1959, the United States total includes Alaska, and in 1960, Hawaii as well. Puerto Rico and Virgin Islands are shown separately and are not included in the United States total.

Definitions of urban and rural areas relative to births and deaths are those of the Vital Statistics Division, Public Health Service. Definitions of metropolitan and nonmetropolitan counties are those of the Bureau of the Census.

Evaluation of the statistical significance of change in a State infant mortality rate was based on the value of chi-square under a hypothesis of uniform mortality conditions. Values with p. greater than .01 and not over .05 (d. f. 1) were considered significant; with p. of .01 or less, highly significant. The difference between death rates of two different countries was regarded as significant if it amounted to more than twice the standard error of the difference.

# REFERENCES


1. Bierman, Jessie M. and French, Fern E.: Ecological Influences on Infant Mortality Among Japanese and Filipino Immigrants to Hawaii, Journal of Tropical Pediatrics and African Child Health, Vol. 9, No. 1, pp. 3-13, 1963.

2. Bureau of the Census, U.S. Department of Commerce, Current Population Reports, Population Estimates, Projections of the Population of the United States by Age and Sex to 1985, Series P-25, No. 279, February 4, 1964.

3. Hunt, Eleanor P. and Chenoweth, Alice D.: Recent Trends in Infant Mortality in the United States, American Journal of Public Health, Vol. 51, No. 2, pp. 190-207, February 1961.

4. Hunt, Eleanor P.: Lags in Reducing Infant Mortality, Welfare in Review, Vol. 2, No. 4, pp. 1-14, April 1964.

5. Lesser, Arthur J.: Current Problems of Maternity Care. Children's Bureau, Welfare Administration, 1963.

6. National Office of Vital Statistics, United States Department of Health, Education, and Welfare, Public Health Service, Vital Statistics of the United States, 1951, Volume I, Table 38, Deaths Under 1 year from 45 Selected Causes by Detailed Age, Race and Sex 1951, United States Government Printing Office, 1954.

7. National Office of Vital Statistics, United States Department of Health, Education, and Welfare, Public Health Service, Vital Statistics of the United States, 1955, Volume I, Table 19, Live Births by Attendant and Birth Weight; Fetal Deaths; and Total, Infant and Neonatal Deaths; by Color: United States, Each State and County and Specified Urban Places, 1955, U.S. Government Printing Office, 1957.

8. National Center for Health Statistics, National Vital Statistics Division, United States Department of Health, Education, and Welfare, Public Health Service, Vital Statistics of the United States, 1961, Volume I - Section 1, Natality-General Summary, U.S. Government Printing Office, 1962.

9. National Center for Health Statistics, National Vital Statistics Division, United States Department of Health, Education, and Welfare, Public Health Service: Vital Statistics of the United States, 1961, Volume I - Section 2, Natality-Characteristics, United States Government Printing Office, 1963.

10. National Center for Health Statistics, National Vital Statistics Division, United States Department of Health, Education, and Welfare, Public Health Service, Vital Statistics of the United States, 1961, Volume I - Section 3, Natality - Local Area Statistics, United States Government Printing Office, 1963.

11. National Center for Health Statistics, National Vital Statistics Division, United States Department of Health, Education, and Welfare, Public Health Service: Vital Statistics of the United States 1961, Volume II - Mortality - Part A and B, United States Government Printing Office, 1963.

12. National Center for Health Statistics, National Vital Statistics Division, United States Department of Health, Education, and Welfare, Public Health Service: Monthly Vital Statistics Report; Advance Report, Final Mortality Statistics, 1962, Vol. 12, No. 6 Supplement, September 13, 1963.

13. National Center for Health Statistics, United States Department of Health, Education, and Welfare, Public Health Service, Medical Care, Health Status, and Family Income, Publication No. 1000, Series 10, No. 9, United States Government Printing Office, 1964.

14. Potter, Edith L., and Shapiro, Sam: Survey of Opinions of Obstetricians Concerning Official Reporting of Fetal Mortality. American Journal of Obstetrics and Gynecology, Vol. 67, No. 3, pp. 651-660, March 1954.

15. Shapiro, Sam and Moriyama, Iwao M.: International Trends in Infant Mortality and Their Implications for the United States, American Journal of Public Health, Vol. 53, 1963.

16. United Nations, Department of Economic and Social Affairs, Statistical Office, Demographic Yearbook, 1962, New York, New York, 1962; and for the years 1961, 1957, 1956, 1954, and 1953 respectively.

17. United Nations, Department of Social Affairs, Foetal, Infant and Early Childhood Mortality, Volumes I and II, Population Studies, No. 13, 1954, New York, New York.

18. Woodbury, Robert Morse, Causal Factors in Infant Mortality, Children's Bureau Publication, No. 142, Government Printing Office, Washington, D.C. 1925.

19. World Health Organization, Epidemiological and Vital Statistics Report, Vol. 10, No. 11-12, 1957, Geneva.

20. World Health Organization, Epidemiological and Vital Statistics Report, Vol. 16, No. 10, 1963, Geneva.

21. World Health Organization, Netherlands, Study of the Effect of Including in Vital Statistics Live Born Under 28 Weeks of Gestation and Dying Before Registration, WHO/HS/NAT.COM./161, 24 April 1964.

Table 1. BIRTH RATE AND TOTAL NUMBER OF LIVE BIRTHS BY COLOR: UNITED STATES, 1909-61

(Rates are per 1,000 estimated mid-year population of all ages, residing in area for specified group. Prior to 1960, data are adjusted for underregistration of live births. Data prior to 1933 are adjusted for States not in the Birth Registration Area. Beginning 1959, includes Alaska and 1960, includes Hawaii)

| YEAR | BIRTH RATE[1] | | | THOUSANDS OF LIVE BIRTHS[2] | | |
|---|---|---|---|---|---|---|
| | Total | White | Nonwhite | Total | White | Nonwhite |
| 1961 [3] | 23.3 | 22.2 | 31.6 | 4,268 | 3,601 | 667 |
| 1960 [3] | 23.7 | 22.7 | 32.1 | 4,258 | 3,601 | 657 |
| 1959 [3] | 24.3 | 23.1 | 34.0 | 4,295 | 3,622 | 673 |
| 1958 [3] | 24.6 | 23.4 | 34.2 | 4,255 | 3,598 | 657 |
| 1957 [3] | 25.3 | 24.1 | 35.2 | 4,308 | 3,648 | 660 |
| 1956 [3] | 25.2 | 24.0 | 35.4 | 4,218 | 3,573 | 645 |
| 1955 | 25.0 | 23.8 | 34.7 | 4,104 | 3,488 | 617 |
| 1954 [3] | 25.3 | 24.1 | 34.9 | 4,078 | 3,475 | 603 |
| 1953 [3] | 25.0 | 24.0 | 34.1 | 3,965 | 3,389 | 575 |
| 1952 [3] | 25.1 | 24.1 | 33.6 | 3,913 | 3,358 | 555 |
| 1951 [3] | 24.9 | 23.9 | 33.8 | 3,823 | 3,277 | 546 |
| 1950 | 24.1 | 23.0 | 33.3 | 3,632 | 3,108 | 524 |
| 1949 | 24.5 | 23.6 | 33.0 | 3,649 | 3,136 | 513 |
| 1948 | 24.9 | 24.0 | 32.4 | 3,637 | 3,141 | 495 |
| 1947 | 26.6 | 26.1 | 31.2 | 3,817 | 3,347 | 469 |
| 1946 | 24.1 | 23.6 | 28.4 | 3,411 | 2,990 | 420 |
| 1945 | 20.4 | 19.7 | 26.5 | 2,858 | 2,471 | 388 |
| 1944 | 21.2 | 20.5 | 27.4 | 2,939 | 2,545 | 394 |
| 1943 | 22.7 | 22.1 | 28.3 | 3,104 | 2,704 | 400 |
| 1942 | 22.2 | 21.5 | 27.7 | 2,989 | 2,605 | 384 |
| 1941 | 20.3 | 19.5 | 27.3 | 2,703 | 2,330 | 374 |
| 1940 | 19.4 | 18.6 | 26.7 | 2,559 | 2,199 | 360 |
| 1939 | 18.8 | 18.0 | 26.1 | 2,466 | 2,117 | 349 |
| 1938 | 19.2 | 18.4 | 26.3 | 2,496 | 2,148 | 348 |
| 1937 | 18.7 | 17.9 | 26.0 | 2,413 | 2,071 | 342 |
| 1936 | 18.4 | 17.6 | 25.1 | 2,355 | 2,027 | 328 |
| 1935 | 18.7 | 17.9 | 25.8 | 2,377 | 2,042 | 334 |
| 1934 | 19.0 | 18.1 | 26.3 | 2,396 | 2,058 | 338 |
| 1933 | 18.4 | 17.6 | 25.5 | 2,307 | 1,982 | 325 |
| 1932 | 19.5 | 18.7 | 26.9 | 2,440 | 2,099 | 341 |
| 1931 | 20.2 | 19.5 | 26.6 | 2,506 | 2,170 | 335 |
| 1930 | 21.3 | 20.6 | 27.5 | 2,618 | 2,274 | 344 |
| 1929 | 21.2 | 20.5 | 27.3 | 2,582 | 2,244 | 339 |
| 1928 | 22.2 | 21.5 | 28.5 | 2,674 | 2,325 | 349 |
| 1927 | 23.5 | 22.7 | 31.1 | 2,802 | 2,425 | 377 |
| 1926 | 24.2 | 23.1 | 33.4 | 2,839 | 2,441 | 398 |
| 1925 | 25.1 | 24.1 | 34.2 | 2,909 | 2,506 | 403 |
| 1924 | 26.1 | 25.1 | 34.6 | 2,979 | 2,577 | 401 |
| 1923 | 26.0 | 25.2 | 33.2 | 2,910 | 2,531 | 380 |
| 1922 | 26.2 | 25.4 | 33.2 | 2,882 | 2,507 | 375 |
| 1921 | 28.1 | 27.3 | 35.8 | 3,055 | 2,657 | 398 |
| 1920 | 27.7 | 26.9 | 35.0 | 2,950 | 2,566 | 383 |
| 1919 | 26.1 | 25.3 | 32.4 | 2,740 | 2,387 | 353 |
| 1918 | 28.2 | 27.6 | 33.0 | 2,948 | 2,588 | 360 |
| 1917 | 28.5 | 27.9 | 32.9 | 2,944 | 2,587 | 357 |
| 1916 | 29.1 | 28.5 | --- | 2,964 | 2,599 | --- |
| 1915 | 29.5 | 28.9 | --- | 2,965 | 2,594 | --- |
| 1914 | 29.9 | 29.3 | --- | 2,966 | 2,588 | --- |
| 1913 | 29.5 | 28.8 | --- | 2,869 | 2,497 | --- |
| 1912 | 29.8 | 29.0 | --- | 2,840 | 2,467 | --- |
| 1911 | 29.9 | 29.1 | --- | 2,809 | 2,435 | --- |
| 1910 | 30.1 | 29.2 | --- | 2,777 | 2,401 | --- |
| 1909 | 30.0 | 29.2 | --- | 2,718 | 2,344 | --- |

1/ For 1917-19 and 1941-46, based on population including Armed Forces abroad.
2/ Figures are rounded to the nearest thousand without being adjusted to totals which are independently rounded.
3/ Based on a 50-percent sample of registered births.



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Table 2. PERCENT OF BIRTHS BY ATTENDANT AND NUMBER OF REGISTERED LIVE BIRTHS, BY COLOR: UNITED STATES, 1935-61

(Data refer only to births occurring within the United States, including in 1959 and later, Alaska and in 1960 and later, Hawaii)

| YEAR AND COLOR | PERCENT DISTRIBUTION OF BIRTHS | | | |
|---|---|---|---|---|
| | In hospital [1] (physician attendant assumed) | Attended by physician outside hospital | Attended by midwife, other, and not specified | Number of registered live births |
| **TOTAL** | | | | |
| 1961 [2] | 96.9 | 1.0 | 2.1 | 4,268,326 |
| 1960 [2] | 96.6 | 1.2 | 2.2 | 4,257,850 |
| 1959 [2] | 96.4 | 1.3 | 2.3 | 4,244,796 |
| 1958 [2] | 96.0 | 1.5 | 2.4 | 4,203,812 |
| 1957 [2] | 95.7 | 1.8 | 2.6 | 4,254,784 |
| 1956 [2] | 95.1 | 2.1 | 2.8 | 4,163,090 |
| 1955 | 94.4 | 2.5 | 3.2 | 4,047,295 |
| 1954 [2] | 93.6 | 2.9 | 3.5 | 4,017,362 |
| 1953 [2] | 92.8 | 3.5 | 3.7 | 3,902,120 |
| 1952 [2] | 91.7 | 4.2 | 4.1 | 3,846,986 |
| 1951 [2] | 90.0 | 5.5 | 4.5 | 3,750,850 |
| 1950 | 88.0 | 7.1 | 4.9 | 3,554,149 |
| 1949 | 86.7 | 8.1 | 5.1 | 3,559,529 |
| 1948 | 85.6 | 9.1 | 5.3 | 3,535,068 |
| 1947 | 84.8 | 10.1 | 5.1 | 3,699,940 |
| 1946 | 82.4 | 12.2 | 5.4 | 3,288,672 |
| 1945 | 78.8 | 14.7 | 6.4 | 2,735,456 |
| 1944 | 75.6 | 17.7 | 6.8 | 2,794,800 |
| 1943 | 72.1 | 21.0 | 7.0 | 2,934,860 |
| 1942 | 67.9 | 24.7 | 7.4 | 2,808,996 |
| 1941 | 61.2 | 30.2 | 8.6 | 2,513,427 |
| 1940 | 55.8 | 35.0 | 9.3 | 2,360,399 |
| 1939 | 51.1 | 39.1 | 9.7 | 2,265,588 |
| 1938 | 48.0 | 41.8 | 10.1 | 2,286,962 |
| 1937 | 44.8 | 44.6 | 10.6 | 2,203,337 |
| 1936 | 40.9 | 47.3 | 11.7 | 2,144,790 |
| 1935 | 36.9 | 50.6 | 12.5 | 2,155,105 |
| **WHITE** | | | | |
| 1961 [2] | 98.9 | 0.6 | 0.5 | 3,600,864 |
| 1960 [2] | 98.8 | 0.7 | 0.5 | 3,600,744 |
| 1959 [2] | 98.7 | 0.8 | 0.5 | 3,597,430 |
| 1958 [2] | 98.4 | 1.0 | 0.6 | 3,572,306 |
| 1957 [2] | 98.2 | 1.2 | 0.6 | 3,621,456 |
| 1956 [2] | 98.0 | 1.4 | 0.6 | 3,545,350 |
| 1955 | 97.5 | 1.8 | 0.8 | 3,458,448 |
| 1954 [2] | 97.0 | 2.1 | 0.9 | 3,443,630 |
| 1953 [2] | 96.5 | 2.6 | 0.9 | 3,356,772 |
| 1952 [2] | 95.7 | 3.2 | 1.1 | 3,322,658 |
| 1951 [2] | 94.4 | 4.4 | 1.2 | 3,237,072 |
| 1950 | 92.8 | 5.9 | 1.3 | 3,063,627 |
| 1949 | 91.6 | 6.9 | 1.4 | 3,083,721 |
| 1948 | 90.4 | 8.1 | 1.5 | 3,080,316 |
| 1947 | 89.3 | 9.2 | 1.5 | 3,274,620 |

See footnotes at end of table.

Table 2. PERCENT OF BIRTHS BY ATTENDANT AND NUMBER OF REGISTERED LIVE BIRTHS, BY COLOR: UNITED STATES, 1935-61—Continued

(Data refer only to births occurring within the United States, including in 1959 and later, Alaska and in 1960 and later, Hawaii)

| YEAR AND COLOR | PERCENT DISTRIBUTION OF BIRTHS | | | |
|---|---|---|---|---|
| | In hospital[1/] (physician attendant assumed) | Attended by physician outside hospital | Attended by midwife, other, and not specified | Number of registered live births |
| WHITE — Continued | | | | |
| 1946 | 87.1 | 11.2 | 1.6 | 2,913,645 |
| 1945 | 84.3 | 13.7 | 2.0 | 2,395,563 |
| 1944 | 81.0 | 16.9 | 2.1 | 2,454,700 |
| 1943 | 77.2 | 20.6 | 2.2 | 2,594,763 |
| 1942 | 72.7 | 24.8 | 2.5 | 2,486,934 |
| 1941 | 65.7 | 31.2 | 3.1 | 2,204,903 |
| 1940 | 59.9 | 36.5 | 3.6 | 2,067,953 |
| 1939 | 55.0 | 41.1 | 3.9 | 1,982,671 |
| 1938 | 51.6 | 44.2 | 4.2 | 2,005,955 |
| 1937 | 48.2 | 47.3 | 4.5 | 1,928,437 |
| 1936 | 43.9 | 50.4 | 5.7 | 1,881,883 |
| 1935 | 39.6 | 54.0 | 6.4 | 1,888,012 |
| NONWHITE | | | | |
| 1961 2/ | 86.0 | 3.1 | 10.9 | 667,462 |
| 1960 2/ | 85.0 | 3.5 | 11.5 | 657,106 |
| 1959 2/ | 83.7 | 4.1 | 12.2 | 647,366 |
| 1958 2/ | 82.5 | 4.5 | 13.1 | 631,506 |
| 1957 2/ | 81.1 | 5.1 | 13.8 | 633,328 |
| 1956 2/ | 78.7 | 5.8 | 15.4 | 617,740 |
| 1955 | 76.0 | 6.8 | 17.2 | 588,847 |
| 1954 2/ | 73.1 | 7.8 | 19.1 | 573,732 |
| 1953 2/ | 70.3 | 9.0 | 20.7 | 545,348 |
| 1952 2/ | 66.4 | 10.6 | 23.0 | 524,328 |
| 1951 2/ | 62.4 | 12.3 | 25.4 | 513,778 |
| 1950 | 57.9 | 14.3 | 27.8 | 490,522 |
| 1949 | 55.1 | 15.9 | 29.0 | 475,808 |
| 1948 | 52.9 | 16.6 | 30.6 | 454,752 |
| 1947 | 49.7 | 17.7 | 32.6 | 425,320 |
| 1946 | 45.2 | 20.0 | 34.8 | 375,027 |
| 1945 | 40.2 | 21.7 | 38.1 | 339,893 |
| 1944 | 37.0 | 23.1 | 39.9 | 340,100 |
| 1943 | 33.3 | 24.0 | 42.7 | 340,097 |
| 1942 | 30.6 | 24.0 | 45.3 | 322,062 |
| 1941 | 29.0 | 23.3 | 47.7 | 308,524 |
| 1940 | 26.7 | 24.1 | 49.2 | 292,446 |
| 1939 | 24.3 | 24.8 | 50.9 | 282,917 |
| 1938 | 22.7 | 25.0 | 52.3 | 281,007 |
| 1937 | 21.0 | 25.5 | 53.5 | 274,900 |
| 1936 | 19.5 | 25.5 | 55.0 | 262,907 |
| 1935 | 18.2 | 26.4 | 55.4 | 267,093 |

1/ It is assumed that all births occurring in hospitals or institutions are attended by physicians.
2/ Based on a 50-percent sample of registered births.

Table 3. NUMBER OF BIRTHS BY COLOR. PERCENT THAT WERE NONWHITE: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1961

(By place of residence. Based on 50-percent sample of registered live births)

| STATE | NUMBER OF BIRTHS | | | Percent that were nonwhite |
|---|---|---|---|---|
| | Total | White | Nonwhite | |
| UNITED STATES[1] | 4,268,326 | 3,600,864 | 667,462 | 15.6 |
| Alabama | 80,690 | 50,600 | 30,090 | 37.3 |
| Alaska | 7,564 | 5,090 | 2,474 | 32.7 |
| Arizona | 36,906 | 31,238 | 5,668 | 15.4 |
| Arkansas | 40,944 | 28,792 | 12,152 | 29.7 |
| California | 381,606 | 337,686 | 43,920 | 11.5 |
| Colorado | 44,652 | 42,902 | 1,750 | 3.9 |
| Connecticut | 57,120 | 52,846 | 4,274 | 7.5 |
| Delaware | 11,854 | 9,474 | 2,380 | 20.1 |
| District of Columbia | 20,372 | 6,140 | 14,232 | 69.4 |
| Florida | 116,656 | 85,850 | 30,806 | 26.4 |
| Georgia | 100,584 | 64,368 | 36,216 | 36.0 |
| Guam | --- | --- | --- | --- |
| Hawaii | 17,616 | 5,418 | 12,198 | 69.2 |
| Idaho | 16,902 | 16,586 | 316 | 1.9 |
| Illinois | 237,382 | 198,088 | 39,294 | 16.6 |
| Indiana | 112,294 | 103,044 | 9,250 | 8.2 |
| Iowa | 63,540 | 62,486 | 1,054 | 1.7 |
| Kansas | 49,988 | 46,748 | 3,240 | 6.5 |
| Kentucky | 71,434 | 65,300 | 6,134 | 8.6 |
| Louisiana | 88,952 | 53,996 | 34,956 | 39.3 |
| Maine | 23,552 | 23,222 | 330 | 1.4 |
| Maryland | 77,748 | 60,310 | 17,438 | 22.4 |
| Massachusetts | 116,484 | 112,102 | 4,382 | 3.9 |
| Michigan | 193,152 | 171,832 | 21,320 | 11.0 |
| Minnesota | 86,112 | 84,498 | 1,614 | 1.9 |
| Mississippi | 59,614 | 27,464 | 32,150 | 53.9 |
| Missouri | 97,056 | 83,824 | 13,232 | 13.6 |
| Montana | 17,368 | 16,020 | 1,348 | 7.8 |
| Nebraska | 34,534 | 32,948 | 1,586 | 4.6 |
| Nevada | 8,084 | 7,110 | 974 | 12.0 |
| New Hampshire | 13,914 | 13,854 | 60 | 0.4 |
| New Jersey | 135,380 | 116,692 | 18,688 | 13.8 |
| New Mexico | 29,942 | 26,590 | 3,352 | 11.2 |
| New York | 362,520 | 313,314 | 49,206 | 13.6 |
| North Carolina | 111,880 | 76,850 | 35,030 | 31.3 |
| North Dakota | 16,566 | 15,886 | 680 | 4.1 |
| Ohio | 229,920 | 205,578 | 24,342 | 10.6 |
| Oklahoma | 51,052 | 43,818 | 7,234 | 14.2 |
| Oregon | 37,538 | 36,248 | 1,290 | 3.4 |
| Pennsylvania | 240,270 | 214,614 | 25,656 | 10.7 |
| Puerto Rico[2] | 75,418 | --- | --- | --- |
| Rhode Island | 18,370 | 17,618 | 752 | 4.1 |
| South Carolina | 59,930 | 34,728 | 25,202 | 42.1 |
| South Dakota | 17,642 | 16,270 | 1,372 | 7.8 |
| Tennessee | 82,248 | 64,020 | 18,228 | 22.2 |
| Texas | 246,444 | 209,294 | 37,150 | 15.1 |
| Utah | 26,466 | 25,846 | 620 | 2.3 |
| Vermont | 9,386 | 9,368 | 18 | 0.2 |
| Virgin Islands[2] | 1,193 | 81 | 1,112 | 93.2 |
| Virginia | 97,054 | 73,158 | 23,896 | 24.6 |
| Washington | 65,056 | 61,238 | 3,818 | 5.9 |
| West Virginia | 39,034 | 37,104 | 1,930 | 4.9 |
| Wisconsin | 98,394 | 94,540 | 3,854 | 3.9 |
| Wyoming | 8,560 | 8,254 | 306 | 3.6 |

1/ Exclusive of Puerto Rico, Virgin Islands and Guam.
2/ By place of occurrence.

Table 4. PERCENT OF BIRTHS BY ATTENDANT AND COLOR: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1961

(In Puerto Rico and Virgin Islands, births in hospitals may be attended by midwives or persons other than physicians. For all other areas, it is assumed that births in hospitals are attended by physicians. By place of residence. Based on 50-percent sample of registered live births)

| STATE | TOTAL | | | WHITE | | | NONWHITE | | |
|---|---|---|---|---|---|---|---|---|---|
| | Physician in hospital | Physician not in hospital | Midwife and other | Physician in hospital | Physician not in hospital | Midwife and other | Physician in hospital | Physician not in hospital | Midwife and other |
| UNITED STATES [1] | 96.9 | 1.0 | 2.1 | 98.9 | 0.6 | 0.5 | 86.0 | 3.1 | 10.9 |
| Alabama | 82.5 | 2.6 | 15.0 | 98.1 | 1.1 | 0.8 | 56.2 | 5.1 | 38.7 |
| Alaska | 90.8 | 0.7 | 8.5 | 99.2 | 0.6 | 0.3 | 73.6 | 1.1 | 25.3 |
| Arizona | 97.2 | 1.1 | 1.7 | 97.7 | 1.1 | 1.2 | 94.5 | 0.7 | 4.9 |
| Arkansas | 87.5 | 3.6 | 9.0 | 98.0 | 1.5 | 0.5 | 62.5 | 8.5 | 29.0 |
| California | 99.2 | 0.6 | 0.2 | 99.2 | 0.5 | 0.2 | 98.7 | 0.8 | 0.5 |
| Colorado | 99.0 | 0.5 | 0.4 | 99.0 | 0.5 | 0.5 | 98.6 | 0.8 | 0.6 |
| Connecticut | 99.8 | 0.2 | 0.0 | 99.8 | 0.2 | 0.0 | 99.2 | 0.7 | 0.2 |
| Delaware | 98.6 | 0.4 | 1.0 | 99.4 | 0.3 | 0.3 | 95.2 | 1.0 | 3.8 |
| District of Columbia | 99.0 | 1.0 | 0.0 | 99.7 | 0.3 | 0.0 | 98.7 | 1.2 | 0.0 |
| Florida | 94.3 | 1.1 | 4.6 | 98.9 | 0.5 | 0.6 | 81.4 | 2.7 | 15.9 |
| Georgia | 88.6 | 2.2 | 9.2 | 99.1 | 0.6 | 0.3 | 70.0 | 4.9 | 25.1 |
| Hawaii | 99.4 | 0.3 | 0.2 | 99.8 | 0.1 | 0.1 | 99.3 | 0.4 | 0.3 |
| Idaho | 99.1 | 0.5 | 0.4 | 99.1 | 0.5 | 0.4 | 98.7 | 0.6 | 0.6 |
| Illinois | 98.3 | 1.6 | 0.1 | 99.1 | 0.9 | 0.0 | 94.2 | 5.5 | 0.4 |
| Indiana | 99.1 | 0.8 | 0.1 | 99.3 | 0.7 | 0.1 | 97.0 | 2.4 | 0.5 |
| Iowa | 99.6 | 0.3 | 0.0 | 99.7 | 0.3 | 0.0 | 99.1 | 0.6 | 0.4 |
| Kansas | 99.6 | 0.3 | 0.1 | 99.6 | 0.3 | 1.0 | 99.0 | 0.6 | 0.5 |
| Kentucky | 94.7 | 2.4 | 2.9 | 95.1 | 2.1 | 2.7 | 91.3 | 4.9 | 3.9 |
| Louisiana | 96.4 | 0.6 | 3.0 | 99.6 | 0.2 | 0.2 | 91.5 | 1.3 | 7.3 |
| Maine | 98.8 | 1.2 | 0.1 | 99.8 | 1.2 | 0.0 | 98.8 | 0.6 | 0.6 |
| Maryland | 98.2 | 1.0 | 0.8 | 99.3 | 0.6 | 0.2 | 94.3 | 2.5 | 3.3 |
| Massachusetts | 99.7 | 0.2 | 0.0 | 99.8 | 0.2 | 0.0 | 98.9 | 1.0 | 0.1 |
| Michigan | 99.4 | 0.5 | 0.0 | 99.6 | 0.4 | 0.0 | 98.0 | 1.8 | 0.1 |
| Minnesota | 99.7 | 0.2 | 0.0 | 99.7 | 0.2 | 0.0 | 99.8 | 0.1 | 0.1 |
| Mississippi | 72.7 | 3.0 | 24.4 | 99.0 | 0.5 | 0.5 | 50.2 | 5.1 | 44.8 |
| Missouri | 98.1 | 1.4 | 0.5 | 98.6 | 1.2 | 0.2 | 95.0 | 2.4 | 2.6 |
| Montana | 99.3 | 0.4 | 0.3 | 99.4 | 0.4 | 0.3 | 98.1 | 0.4 | 1.5 |
| Nebraska | 99.7 | 0.3 | 0.0 | 99.7 | 0.3 | 0.0 | 99.1 | 0.5 | 0.4 |
| Nevada | 99.7 | 0.2 | 0.1 | 99.8 | 0.1 | 0.1 | 98.8 | 0.8 | 0.2 |
| New Hampshire | 99.8 | 0.2 | 0.0 | 99.8 | 0.2 | 0.0 | 100.0 | 0 | 0 |
| New Jersey | 99.3 | 0.5 | 0.1 | 99.6 | 0.4 | 0.0 | 97.8 | 1.4 | 0.7 |
| New Mexico | 95.4 | 1.3 | 3.3 | 95.4 | 1.3 | 3.3 | 95.0 | 1.1 | 3.8 |
| New York | 99.3 | 0.6 | 0.1 | 99.5 | 0.4 | 0.1 | 98.2 | 1.5 | 0.3 |
| North Carolina | 92.5 | 2.4 | 5.1 | 99.4 | 0.4 | 0.2 | 77.3 | 6.8 | 15.9 |
| North Dakota | 99.8 | 0.1 | 0.1 | 99.8 | 0.1 | 0.0 | 98.5 | 0.6 | 0.9 |
| Ohio | 99.3 | 0.6 | 0.1 | 99.3 | 0.6 | 0.0 | 99.3 | 0.5 | 0.2 |
| Oklahoma | 98.2 | 0.7 | 1.0 | 99.0 | 0.6 | 0.4 | 93.4 | 1.7 | 5.0 |
| Oregon | 99.3 | 0.4 | 0.2 | 99.3 | 0.4 | 0.2 | 98.1 | 0.9 | 0.9 |
| Pennsylvania | 99.3 | 0.6 | 0.0 | 99.3 | 0.6 | 0.0 | 98.9 | 1.0 | 0.1 |
| Puerto Rico [2] | 77.5 | 0 | 22.5 | --- | --- | --- | --- | --- | --- |
| Rhode Island | 99.6 | 0.3 | 0.1 | 99.7 | 0.2 | 0.1 | 98.9 | 0.8 | 0.3 |
| South Carolina | 83.7 | 3.8 | 12.3 | 98.8 | 0.9 | 0.4 | 62.8 | 7.9 | 29.2 |
| South Dakota | 99.0 | 0.4 | 0.4 | 99.3 | 0.3 | 0.4 | 95.0 | 1.0 | 3.9 |
| Tennessee | 95.5 | 2.7 | 2.4 | 98.3 | 1.1 | 0.6 | 85.9 | 5.8 | 8.3 |
| Texas | 93.8 | 1.4 | 4.8 | 95.0 | 1.3 | 3.7 | 87.1 | 2.0 | 10.0 |
| Utah | 98.9 | 0.6 | 0.6 | 99.1 | 0.6 | 0.3 | 91.9 | 1.3 | 6.8 |
| Vermont | 98.5 | 1.5 | 0.0 | 98.5 | 1.5 | 0.0 | 100.0 | 0 | 0 |
| Virgin Islands [2] | 85.1 | 0 | 15.9 | 100.0 | 0 | 0 | 84.0 | 0 | 16.0 |
| Virginia | 93.5 | 1.5 | 5.0 | 98.6 | 0.8 | 0.6 | 77.8 | 3.8 | 18.4 |
| Washington | 99.5 | 0.3 | 0.1 | 99.6 | 0.3 | 0.1 | 99.3 | 0.4 | 0.3 |
| West Virginia | 96.9 | 1.9 | 1.2 | 97.2 | 1.8 | 1.1 | 91.3 | 3.8 | 4.8 |
| Wisconsin | 99.7 | 0.3 | 0.0 | 99.7 | 0.2 | 0.0 | 98.2 | 1.7 | 0.2 |
| Wyoming | 99.6 | 0.2 | 0.1 | 99.6 | 0.2 | 0.1 | 98.7 | 0 | 1.4 |

1/ Exclusive of Puerto Rico and Virgin Islands.
2/ By place of occurrence.

Table 5. NEONATAL MORTALITY BY AGE: UNITED STATES, 1942-61

(Rates are per 1,000 live births)

| YEAR | Neonatal[1/] (Under 28 days) | Under 3 days | Under 1 day | 1 day | 2 days | 3-6 days | 7 days-under 28 days |
|---|---|---|---|---|---|---|---|
| | RATE | | | | | | |
| 1961 | 18.4 | 14.6 | 10.3 | 2.7 | 1.7 | 1.8 | 1.9 |
| 1960 | 18.7 | 14.8 | 10.3 | 2.7 | 1.8 | 1.9 | 2.0 |
| 1959 | 19.0 | 14.9 | 10.3 | 2.8 | 1.8 | 2.0 | 2.1 |
| 1958 | 19.5 | 14.8 | 10.2 | 2.8 | 1.9 | 2.3 | 2.3 |
| 1957 | 19.1 | 14.5 | 9.9 | 2.8 | 1.8 | 2.2 | 2.4 |
| 1956 | 18.9 | 14.5 | 9.9 | 2.8 | 1.7 | 2.2 | 2.2 |
| 1955 | 19.1 | 14.7 | 10.0 | 2.9 | 1.8 | 2.2 | 2.1 |
| 1954 | 19.1 | 14.5 | 9.6 | 2.9 | 1.9 | 2.3 | 2.3 |
| 1953 | 19.6 | 14.6 | 9.7 | 3.0 | 2.0 | 2.5 | 2.4 |
| 1952 | 19.8 | 14.8 | 9.7 | 3.0 | 2.1 | 2.5 | 2.6 |
| 1951 | 20.0 | 14.9 | 9.8 | 3.1 | 2.1 | 2.6 | 2.6 |
| 1950 | 20.5 | 15.3 | 10.2 | 3.1 | 2.0 | 2.5 | 2.7 |
| 1949 | 21.4 | 15.7 | 10.5 | 3.1 | 2.1 | 2.6 | 3.1 |
| 1948 | 22.2 | 16.1 | 10.7 | 3.4 | 2.1 | 2.8 | 3.3 |
| 1947 | 22.8 | 16.3 | 10.7 | 3.4 | 2.1 | 3.0 | 3.5 |
| 1946 | 24.0 | 17.1 | 11.4 | 3.5 | 2.2 | 3.0 | 4.0 |
| 1945 | 24.3 | 16.6 | 11.2 | 3 3 | 2.1 | 3.1 | 4.6 |
| 1944 | 24.7 | 16.8 | 11.5 | 3.3 | 2.1 | 3.1 | 4.7 |
| 1943 | 24.7 | 16.9 | 11.6 | 3.2 | 2.0 | 3.1 | 4.8 |
| 1942 | 25.7 | 17.7 | 12.3 | 3.3 | 2.1 | 3.1 | 4.8 |
| | NUMBER OF DEATHS | | | | | | |
| 1961 | 78,482 | 62,500 | 43,815 | 11,373 | 7,342 | 7,776 | 8,206 |
| 1960 | 79,733 | 63,115 | 44,033 | 11,549 | 7,533 | 8,010 | 8,608 |
| 1959 | 80,778 | 63,239 | 43,712 | 11,789 | 7,738 | 8,506 | 9,033 |
| 1958 | 81,798 | 62,405 | 42,943 | 11,645 | 7,817 | 9,617 | 9,776 |
| 1957 | 81,088 | 61,834 | 42,326 | 11,710 | 7,798 | 9,251 | 10,003 |
| 1956 | 78,659 | 60,335 | 41,325 | 11,744 | 7,266 | 8,988 | 9,336 |
| 1955 | 77,351 | 59,621 | 40,480 | 11,692 | 7,449 | 9,033 | 8,697 |
| 1954 | 76,724 | 58,074 | 38,670 | 11,618 | 7,786 | 9,279 | 9,371 |
| 1953 | 76,332 | 57,111 | 37,676 | 11,552 | 7,883 | 9,673 | 9,548 |
| 1952 | 76,253 | 56,927 | 37,412 | 11,593 | 7,922 | 9,453 | 9,873 |
| 1951 | 75,192 | 55,947 | 36,673 | 11,544 | 7,730 | 9,566 | 9,679 |
| 1950 | 72,855 | 54,411 | 36,075 | 11,081 | 7,255 | 9,006 | 9,438 |
| 1949 | 76,326 | 55,797 | 37,259 | 11,152 | 7,386 | 9,377 | 11,152 |
| 1948 | 78,426 | 57,032 | 37,652 | 11,916 | 7,464 | 9,761 | 11,633 |
| 1947 | 84,296 | 60,289 | 39,716 | 12,683 | 7,890 | 10,996 | 13,011 |
| 1946 | 79,079 | 56,104 | 37,603 | 11,406 | 7,095 | 9,944 | 13,031 |
| 1945 | 66,593 | 45,535 | 30,674 | 9,129 | 5,732 | 8,457 | 12,601 |
| 1944 | 68,996 | 47,090 | 32,052 | 9,219 | 5,819 | 8,680 | 13,226 |
| 1943 | 72,632 | 49,530 | 34,014 | 9,516 | 6,000 | 9,050 | 14,052 |
| 1942 | 72,122 | 49,758 | 34,616 | 9,230 | 5,912 | 8,822 | 13,542 |

1/ In 1949 and following years, neonatal is defined as under 28 days. Prior to 1949, the neonatal period was under 30 days.

## Table 6. INFANT MORTALITY RATE BY AGE AND COLOR: UNITED STATES, 1915-61

(Rates are per 1,000 live births. Data are for States in the Birth Registration Area which was begun in 1915 and has included all States since 1933)

| YEAR | INFANT (Under 1 year) | | | NEONATAL[1] (Under 28 days) | | | POSTNEONATAL[1] (28 days to 1 year) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | White | Nonwhite | Total | White | Nonwhite | Total | White | Nonwhite |
| 1961 | 25.3 | 22.4 | 40.7 | 18.4 | 16.9 | 26.2 | 6.9 | 5.5 | 14.5 |
| 1960 | 26.0 | 22.9 | 43.2 | 18.7 | 17.2 | 26.9 | 7.3 | 5.7 | 16.4 |
| 1959 | 26.4 | 23.2 | 44.0 | 19.0 | 17.5 | 27.7 | 7.4 | 5.7 | 16.3 |
| 1958 | 27.1 | 23.8 | 45.7 | 19.5 | 17.8 | 29.0 | 7.6 | 6.0 | 16.7 |
| 1957 | 26.3 | 23.3 | 43.7 | 19.0 | 17.5 | 27.8 | 7.3 | 5.8 | 15.9 |
| 1956 | 26.0 | 23.2 | 42.1 | 18.9 | 17.5 | 27.0 | 7.1 | 5.7 | 15.1 |
| 1955 | 26.4 | 23.6 | 42.8 | 19.1 | 17.7 | 27.2 | 7.3 | 5.9 | 15.6 |
| 1954 | 26.6 | 23.9 | 42.9 | 19.1 | 17.8 | 27.0 | 7.5 | 6.1 | 15.9 |
| 1953 | 27.8 | 25.0 | 44.7 | 19.6 | 18.3 | 27.4 | 8.2 | 6.7 | 17.3 |
| 1952 | 28.4 | 25.5 | 47.0 | 19.8 | 18.5 | 28.0 | 8.6 | 7.0 | 19.0 |
| 1951 | 28.4 | 25.8 | 44.8 | 20.0 | 18.9 | 27.3 | 8.4 | 6.9 | 17.5 |
| 1950 | 29.2 | 26.8 | 44.5 | 20.5 | 19.4 | 27.5 | 8.7 | 7.4 | 17.0 |
| 1949 | 31.3 | 28.9 | 47.3 | 21.4 | 20.3 | 28.6 | 9.9 | 8.5 | 18.8 |
| 1948 | 32.0 | 29.9 | 46.5 | 22.2 | 21.2 | 29.1 | 9.8 | 8.7 | 17.4 |
| 1947 | 32.2 | 30.1 | 48.5 | 22.8 | 21.7 | 31.0 | 9.4 | 8.4 | 17.5 |
| 1946 | 33.8 | 31.8 | 49.5 | 24.0 | 23.1 | 31.5 | 9.8 | 8.7 | 17.9 |
| 1945 | 38.3 | 35.6 | 57.0 | 24.3 | 23.3 | 32.0 | 14.0 | 12.3 | 25.0 |
| 1944 | 39.8 | 36.9 | 60.3 | 24.7 | 23.6 | 32.5 | 15.1 | 13.3 | 27.8 |
| 1943 | 40.4 | 37.5 | 62.5 | 24.7 | 23.7 | 32.9 | 15.7 | 13.8 | 29.6 |
| 1942 | 40.4 | 37.3 | 64.6 | 25.7 | 24.5 | 34.6 | 14.7 | 12.8 | 30.0 |
| 1941 | 45.3 | 41.2 | 74.8 | 27.7 | 26.1 | 39.0 | 17.6 | 15.1 | 35.8 |
| 1940 | 47.0 | 43.2 | 73.8 | 28.8 | 27.2 | 39.7 | 18.2 | 16.0 | 34.1 |
| 1939 | 48.0 | 44.3 | 74.2 | 29.3 | 27.8 | 39.6 | 18.7 | 16.5 | 34.6 |
| 1938 | 51.0 | 47.1 | 79.1 | 29.6 | 28.3 | 39.1 | 21.4 | 18.8 | 40.0 |
| 1937 | 54.4 | 50.3 | 83.2 | 31.3 | 29.7 | 42.1 | 23.1 | 20.6 | 41.1 |
| 1936 | 57.1 | 52.9 | 87.6 | 32.6 | 31.0 | 43.9 | 24.5 | 21.9 | 43.7 |
| 1935 | 55.7 | 51.9 | 83.2 | 32.4 | 31.0 | 42.7 | 23.3 | 20.9 | 40.5 |
| 1934 | 60.1 | 54.5 | 94.4 | 34.1 | 32.3 | 45.3 | 26.0 | 22.2 | 49.1 |
| 1933 | 58.1 | 52.8 | 91.3 | 34.0 | 32.1 | 45.8 | 24.1 | 20.7 | 45.5 |
| 1932 | 57.6 | 53.3 | 86.2 | 33.5 | 32.0 | 43.7 | 24.1 | 21.3 | 42.5 |
| 1931 | 61.6 | 57.4 | 93.1 | 34.6 | 33.2 | 45.2 | 27.0 | 24.2 | 47.9 |
| 1930 | 64.6 | 60.1 | 99.9 | 35.7 | 34.2 | 47.4 | 28.9 | 25.9 | 52.5 |
| 1929 | 67.6 | 63.2 | 102.2 | 36.9 | 35.6 | 47.3 | 30.7 | 27.6 | 54.9 |
| 1928 | 68.7 | 64.0 | 106.2 | 37.2 | 35.7 | 48.8 | 31.5 | 28.3 | 57.4 |
| 1927 | 64.6 | 60.6 | 100.1 | 36.1 | 35.0 | 46.1 | 28.5 | 25.6 | 54.0 |
| 1926 | 73.3 | 70.0 | 111.8 | 37.9 | 37.1 | 48.0 | 35.4 | 32.9 | 63.8 |
| 1925 | 71.7 | 68.3 | 110.8 | 37.8 | 36.8 | 49.5 | 33.9 | 31.5 | 61.3 |
| 1924 | 70.8 | 66.8 | 112.9 | 38.6 | 37.4 | 51.2 | 32.2 | 29.4 | 61.7 |
| 1923 | 77.1 | 73.5 | 117.4 | 39.5 | 38.6 | 49.9 | 37.6 | 34.9 | 67.5 |
| 1922 | 76.2 | 73.2 | 110.0 | 39.7 | 38.8 | 49.9 | 36.5 | 34.4 | 60.1 |
| 1921 | 75.6 | 72.5 | 108.5 | 39.7 | 38.7 | 50.3 | 35.9 | 33.8 | 58.2 |
| 1920 | 85.8 | 82.1 | 131.7 | 41.5 | 40.4 | 55.0 | 44.3 | 41.7 | 76.7 |
| 1919 | 86.6 | 83.0 | 130.5 | 41.5 | 40.3 | 55.2 | 45.1 | 42.7 | 75.3 |
| 1918 | 100.9 | 97.4 | 161.2 | 44.2 | 43.3 | 60.5 | 56.7 | 54.1 | 100.7 |
| 1917 | 93.8 | 90.5 | 150.7 | 43.4 | 42.6 | 58.0 | 50.4 | 47.9 | 92.7 |
| 1916 | 101.0 | 99.0 | 184.9 | 44.1 | 43.5 | 68.9 | 56.9 | 55.5 | 116.0 |
| 1915 | 99.9 | 98.6 | 181.2 | 44.4 | --- | --- | 55.5 | --- | --- |

1/In 1949 and following years, neonatal is defined as under 28 days; postneonatal as 28 days to under one year. Prior to 1949, the neonatal period was under 30 days.

Table 7. INFANT MORTALITY ACCORDING TO CERTAIN CAUSE GROUPINGS: UNITED STATES, 1961 AND 1951

(Exclusive of Fetal Deaths)

| CAUSE GROUPINGS | Category number 1/ | RATE PER 10,000 LIVE BIRTHS | | | DEATHS UNDER 1 YEAR | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | 1961 | | 1951 | |
| | | 1961 | 1951 | Percent change | Number | Percent | Number | Percent |
| ALL CAUSES | | 252.9 | 284.5 | -11.1 | 107,956 | 100.0 | 106,702 | 100.0 |
| Prenatal and natal causes | ... | 159.3 | 186.9 | -14.8 | 67,980 | 63.0 | 70,116 | 65.7 |
| Postnatal asphyxia and atelectasis | 762 | 44.6 | 40.4 | +10.4 | 19,023 | 17.6 | 15,148 | 14.2 |
| Congenital malformations | 750-759 | 36.3 | 39.2 | -7.4 | 15,515 | 14.4 | 14,721 | 13.8 |
| Birth injuries | 760-761 | 23.2 | 31.5 | -26.4 | 9,922 | 9.2 | 11,808 | 11.1 |
| Blood dyscrasias | 770-771 | 6.2 | 9.6 | -35.4 | 2,664 | 2.5 | 3,596 | 3.4 |
| Immaturity and other prenatal and natal causes | ... | 48.9 | 66.2 | -26.1 | 20,856 | 19.3 | 24,843 | 23.3 |
| Immaturity unqualified | 776 | 43.6 | 61.6 | -29.2 | 18,595 | 17.2 | 23,114 | 21.7 |
| Immaturity with mention of any subsidiary condition | 774 | 3.2 | 3.0 | +6.7 | 1,347 | 1.2 | 1,116 | 1.0 |
| Neonatal disorders arising from certain diseases of the mother | 769 | 2.1 | 1.6 | +31.3 | 914 | 0.8 | 613 | 0.6 |
| Postnatal causes | ... | 93.7 | 97.5 | -3.9 | 39,976 | 37.0 | 36,586 | 34.3 |
| Influenza and pneumonia | 480-493 | 21.6 | 22.2 | -2.7 | 9,202 | 8.5 | 8,313 | 7.8 |
| Ill-defined neonatal conditions | 772-773 | 19.9 | 9.9 | +101.0 | 8,491 | 7.9 | 3,723 | 3.5 |
| Nutritional maladjustment | 772 | 1.7 | 2.5 | -32.0 | 735 | 0.7 | 952 | 0.9 |
| Ill-defined diseases peculiar to early infancy | 773 | 18.2 | 7.4 | +145.9 | 7,756 | 7.2 | 2,771 | 2.6 |
| Certain infections | ... | 18.0 | 15.1 | +19.2 | 7,663 | 7.1 | 5,663 | 5.3 |
| Other sepsis of newborn | 765-768 | 1.7 | 1.1 | +54.5 | 746 | 0.7 | 415 | 0.4 |
| Diarrhea of newborn | 764 | 1.0 | 1.8 | -44.5 | 419 | 0.4 | 686 | 0.6 |
| Other respiratory diseases | 470-475,500-527 | 6.0 | 4.1 | +46.3 | 2,582 | 2.4 | 1,545 | 1.4 |
| Septicemia and pyemia | 053 | 0.9 | 0.5 | +80.0 | 375 | 0.3 | 192 | 0.2 |
| Pneumonia of newborn | 763 | 8.3 | 7.5 | +10.7 | 3,541 | 3.3 | 2,825 | 2.6 |
| Other diseases of digestive system | 530-587 | 9.1 | 14.6 | -37.7 | 3,887 | 3.6 | 5,463 | 5.1 |
| Accidents | E-800-E-962 | 8.4 | 9.9 | -15.2 | 3,581 | 3.3 | 3,711 | 3.5 |
| Other postnatal causes | ... | 16.8 | 25.9 | -35.1 | 7,152 | 6.6 | 9,713 | 9.1 |
| Symptoms and ill-defined conditions | 780-795 | 5.6 | 9.0 | -37.8 | 2,395 | 2.2 | 3,379 | 3.2 |
| Infective and parasitic diseases | 001-019,020,030-044, 045-052.054-138 | 2.2 | 6.9 | -68.1 | 929 | 0.9 | 2,580 | 2.4 |
| Diseases of nervous system and sense organs | 330-334,340-398 | 4.1 | 3.6 | +13.9 | 1,734 | 1.6 | 1,361 | 1.3 |
| All other | Residual | 4.9 | 6.4 | -23.4 | 2,094 | 1.9 | 2,393 | 2.2 |

1/Category numbers are those of the Seventh Revision of the International Lists (1955), according to which deaths in 1961 are classified. Deaths in 1951 are classified under the Sixth Revision (1948).

Table 8. INFANT MORTALITY RATES BY AGE FOR MAIN CAUSES: UNITED STATES, 1961

(Rates are per 1,000 live births. Numbers after names of causes are category numbers of the Seventh Revision of the International Lists. Exclusive of fetal deaths)

| CAUSE OF DEATH | Infant (Under 1 year) | Neonatal (Under 28 days) | Post-neonatal (28 days to 1 year) |
|---|---|---|---|
| ALL CAUSES | 25.3 | 18.4 | 6.9 |
| Certain diseases of early infancy-760-76 | 15.4 | 15.1 | 0.3 |
| With immaturity ( .5) | 7.0 | 6.9 | 0.1 |
| Without mention of immaturity ( .0) | 8.4 | 8.1 | 0.2 |
| Immaturity unqualified-776 | 4.4 | 4.3 | 0.0 |
| Postnatal asphyxia and atelectasis-762 | 4.5 | 4.4 | 0.1 |
| With immaturity ( .5) | 3.3 | 3.2 | 0.0 |
| Without mention of immaturity ( .0) | 1.2 | 1.1 | 0.1 |
| Birth injuries-760-1 | 2.3 | 2.3 | 0.0 |
| With immaturity ( .5) | 1.4 | 1.4 | 0.0 |
| Without mention of immaturity ( .0) | 0.9 | 0.9 | 0.0 |
| Pneumonia of newborn-763 | 0.8 | 0.8 | ... |
| With immaturity ( .5) | 0.2 | 0.2 | ... |
| Without mention of immaturity ( .0) | 0.6 | 0.6 | ... |
| Hemolytic disease of newborn (erythroblastosis)-770 | 0.5 | 0.5 | 0.0 |
| With immaturity ( .5) | 0.1 | 0.1 | 0.0 |
| Without mention of immaturity ( .0) | 0.4 | 0.4 | 0.0 |
| Hemorrhagic disease of newborn-771 | 0.1 | 0.1 | 0.0 |
| With immaturity ( .5) | 0.1 | 0.1 | 0 |
| Without mention of immaturity ( .0) | 0.1 | 0.1 | 0.0 |
| Diarrhea of newborn-764 | 0.1 | 0.1 | 0.0 |
| With immaturity ( .5) | 0.0 | 0.0 | 0 |
| Without mention of immaturity ( .0) | 0.1 | 0.1 | 0.0 |
| Neonatal disorders arising from maternal toxemia-769 | 0.2 | 0.2 | 0.0 |
| With immaturity ( .5) | 0.1 | 0.1 | 0.0 |
| Without mention of immaturity ( .0) | 0.1 | 0.1 | 0.0 |
| Other and ill-defined diseases peculiar to early infancy, including nutritional maladjustment 765-8, 772-4 | 2.5 | 2.3 | 0.2 |
| With immaturity ( .5) | 1.8 | 1.7 | 0.1 |
| Without mention of immaturity ( .0) | 0.7 | 0.5 | 0.2 |
| Congenital malformations-750-9 | 3.6 | 2.4 | 1.3 |
| Influenza and pneumonia (except pneumonia of newborn)-480-93 | 2.2 | 0.0 | 2.1 |
| All other diseases of respiratory system-470-5, 500-27 | 0.6 | 0.1 | 0.5 |
| Gastritis, duodenitis, enteritis, and colitis (except diarrhea of newborn)-543, 571-2 | 0.5 | 0.0 | 0.5 |
| All infective and parasitic diseases-001-138 | 0.3 | 0.0 | 0.3 |
| Accidental mechanical suffocation in bed or cradle-E924 | 0.2 | 0.0 | 0.2 |
| All other accidental causes-E800-923, E925-62 | 0.6 | 0.1 | 0.5 |
| Other specified conditions-Residual | 1.3 | 0.5 | 0.8 |
| Symptoms and ill-defined conditions-780-95 | 0.6 | 0.2 | 0.3 |

Table 9. INFANT DEATHS AND MORTALITY RATE BY COLOR: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1961

(By place of residence)

| AREA | DEATHS UNDER 1 YEAR | | | RATE PER 1,000 LIVE BIRTHS | | |
|---|---|---|---|---|---|---|
| | Total | White | Nonwhite | Total | White | Nonwhite |
| UNITED STATES 1/ | 107,956 | 80,781 | 27,175 | 25.3 | 22.4 | 40.7 |
| Alabama | 2,509 | 1,198 | 1,311 | 31.1 | 23.7 | 43.6 |
| Alaska | 280 | 131 | 149 | 37.0 | 25.7 | 60.2 |
| Arizona | 1,129 | 832 | 297 | 30.6 | 26.6 | 52.4 |
| Arkansas | 1,125 | 628 | 497 | 27.5 | 21.8 | 40.9 |
| California | 8,882 | 7,612 | 1,270 | 23.3 | 22.5 | 28.9 |
| Colorado | 1,172 | 1,107 | 65 | 26.2 | 25.8 | 37.1 |
| Connecticut | 1,272 | 1,107 | 165 | 22.3 | 20.9 | 38.6 |
| Delaware | 310 | 196 | 114 | 26.2 | 20.7 | 47.9 |
| District of Columbia | 725 | 167 | 558 | 35.6 | 27.2 | 39.2 |
| Florida | 3,376 | 1,993 | 1,383 | 28.9 | 23.2 | 44.9 |
| Georgia | 2,953 | 1,383 | 1,570 | 29.4 | 21.5 | 43.4 |
| Hawaii | 382 | 118 | 264 | 21.7 | 21.8 | 21.6 |
| Idaho | 390 | 381 | 9 | 23.1 | 23.0 | 28.5 |
| Illinois | 5,771 | 4,309 | 1,462 | 24.3 | 21.8 | 37.2 |
| Indiana | 2,694 | 2,323 | 371 | 24.0 | 22.5 | 40.1 |
| Iowa | 1,309 | 1,273 | 36 | 20.6 | 20.4 | 34.2 |
| Kansas | 1,106 | 1,021 | 85 | 22.1 | 21.8 | 26.2 |
| Kentucky | 1,988 | 1,706 | 282 | 27.8 | 26.1 | 46.0 |
| Louisiana | 2,693 | 1,165 | 1,528 | 30.3 | 21.6 | 43.7 |
| Maine | 595 | 586 | 9 | 25.3 | 25.2 | 27.3 |
| Maryland | 1,996 | 1,269 | 727 | 25.7 | 21.0 | 41.7 |
| Massachusetts | 2,512 | 2,367 | 145 | 21.6 | 21.1 | 33.1 |
| Michigan | 4,608 | 3,877 | 731 | 23.9 | 22.6 | 34.3 |
| Minnesota | 1,912 | 1,857 | 55 | 22.2 | 22.0 | 34.1 |
| Mississippi | 2,252 | 649 | 1,603 | 37.8 | 23.6 | 49.9 |
| Missouri | 2,394 | 1,833 | 561 | 24.7 | 21.9 | 42.4 |
| Montana | 444 | 380 | 64 | 25.6 | 23.7 | 47.5 |
| Nebraska | 786 | 733 | 53 | 22.8 | 22.2 | 33.4 |
| Nevada | 229 | 189 | 40 | 28.3 | 26.6 | 41.1 |
| New Hampshire | 339 | 338 | 1 | 24.4 | 24.4 | 16.7 |
| New Jersey | 3,191 | 2,415 | 776 | 23.6 | 20.7 | 41.5 |
| New Mexico | 886 | 751 | 135 | 29.6 | 28.2 | 40.3 |
| New York | 8,599 | 6,617 | 1,982 | 23.7 | 21.1 | 40.3 |
| North Carolina | 3,432 | 1,739 | 1,693 | 30.7 | 22.6 | 48.3 |
| North Dakota | 384 | 353 | 31 | 23.2 | 22.2 | 45.6 |
| Ohio | 5,318 | 4,456 | 862 | 23.1 | 21.7 | 35.4 |
| Oklahoma | 1,226 | 968 | 258 | 24.0 | 22.1 | 35.7 |
| Oregon | 859 | 818 | 41 | 22.9 | 22.6 | 31.8 |
| Pennsylvania | 5,664 | 4,578 | 1,086 | 23.6 | 21.3 | 42.3 |
| Puerto Rico 2/ | 3,129 | --- | --- | 41.5 | 3/ | 3/ |
| Rhode Island | 413 | 393 | 20 | 22.5 | 22.3 | 26.6 |
| South Carolina | 1,939 | 787 | 1,152 | 32.4 | 22.7 | 45.7 |
| South Dakota | 443 | 370 | 73 | 25.1 | 22.7 | 53.2 |
| Tennessee | 2,402 | 1,631 | 771 | 29.2 | 25.5 | 42.3 |
| Texas | 6,568 | 5,081 | 1,487 | 26.7 | 24.3 | 40.0 |
| Utah | 538 | 512 | 26 | 20.3 | 19.9 | 41.9 |
| Vermont | 255 | 255 | 0 | 27.2 | 27.2 | 0 |
| Virgin Islands 2/ | 51 | 3 | 48 | 42.7 | 3/ | 3/ |
| Virginia | 2,722 | 1,691 | 1,031 | 28.0 | 23.1 | 43.1 |
| Washington | 1,478 | 1,335 | 143 | 22.7 | 21.8 | 37.5 |
| West Virginia | 1,042 | 977 | 65 | 26.7 | 26.3 | 33.7 |
| Wisconsin | 2,233 | 2,111 | 122 | 22.7 | 22.3 | 31.7 |
| Wyoming | 231 | 215 | 16 | 27.0 | 26.0 | 52.3 |

1/ Exclusive of Puerto Rico and Virgin Islands.
2/ By place of occurrence.
3/ Not computed due to lack of uniformity in classification by color in Puerto Rico and small number of births to white mothers in Virgin Islands.

Table 10. INFANT MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

TOTAL INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 26.2 | 26.3 | -0.4* |
| Alabama | 32.7 | 32.1 | +1.9 |
| Alaska 2/ | 39.7 | 38.0 | +4.5 |
| Arizona | 32.1 | 35.6 | -9.8** |
| Arkansas | 26.9 | 26.5 | +1.5 |
| California | 23.7 | 24.0 | -1.3* |
| Colorado | 28.3 | 30.2 | -6.3** |
| Connecticut | 22.4 | 21.9 | +2.3 |
| Delaware | 25.7 | 25.4 | +1.2 |
| District of Columbia | 36.8 | 32.5 | +13.2** |
| Florida | 30.5 | 31.2 | -2.3 |
| Georgia | 31.5 | 30.5 | +3.3* |
| Hawaii 2/ | 23.0 | 22.4 | +2.7 |
| Idaho | 23.0 | 22.9 | +0.4 |
| Illinois | 24.8 | 24.9 | -0.4 |
| Indiana | 24.0 | 24.7 | -2.8* |
| Iowa | 21.7 | 21.2 | +2.4 |
| Kansas | 22.5 | 23.4 | -3.9* |
| Kentucky | 28.1 | 29.6 | -5.1** |
| Louisiana | 32.5 | 31.2 | +4.2** |
| Maine | 25.8 | 24.8 | +4.0 |
| Maryland | 27.6 | 27.2 | +1.5 |
| Massachusetts | 22.1 | 22.5 | -1.8 |
| Michigan | 24.2 | 24.7 | -2.0 |
| Minnesota | 21.9 | 22.0 | -0.5 |
| Mississippi | 39.8 | 37.1 | +7.3** |
| Missouri | 25.1 | 25.4 | -1.2 |
| Montana | 25.2 | 25.2 | 0 |
| Nebraska | 23.2 | 23.4 | -0.9 |
| Nevada | 30.6 | 30.1 | +1.7 |
| New Hampshire | 23.7 | 24.2 | -2.1 |
| New Jersey | 24.3 | 24.1 | +0.8 |
| New Mexico | 33.2 | 40.1 | -17.2** |
| New York | 24.3 | 23.9 | +1.7** |
| North Carolina | 31.9 | 30.5 | +4.6** |
| North Dakota | 24.2 | 25.0 | -3.2 |
| Ohio | 24.4 | 24.8 | -1.6* |
| Oklahoma | 25.2 | 26.5 | -4.9** |
| Oregon | 23.6 | 22.9 | +3.1 |
| Pennsylvania | 24.6 | 24.6 | 0 |
| Puerto Rico 2/ | 46.4 | 54.7 | -16.2** |
| Rhode Island | 22.8 | 23.7 | -3.8 |
| South Carolina | 33.9 | 32.7 | +3.7* |
| South Dakota | 25.6 | 25.2 | +1.6 |
| Tennessee | 29.9 | 29.0 | +3.1* |
| Texas | 28.7 | 30.1 | -4.7** |
| Utah | 20.5 | 21.2 | -3.3 |
| Vermont | 24.3 | 25.2 | -3.6 |
| Virgin Islands 2/ | 41.4 | 50.4 | -17.9* |
| Virginia | 30.0 | 30.0 | 0 |
| Washington | 24.1 | 24.1 | 0 |
| West Virginia | 26.4 | 27.0 | -2.2 |
| Wisconsin | 22.9 | 22.7 | +0.9 |
| Wyoming | 27.5 | 28.3 | -2.8 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

Table 10a. INFANT MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

WHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 23.1 | 23.5 | -1.7** |
| Alabama | 24.6 | 24.9 | -1.2 |
| Alaska 2/ | 27.0 | 25.1 | +7.6 |
| Arizona | 27.5 | 28.8 | -4.5 |
| Arkansas | 22.0 | 22.3 | -1.4 |
| California | 22.8 | 23.3 | -2.6** |
| Colorado | 27.8 | 29.8 | -6.7** |
| Connecticut | 20.9 | 20.7 | +1.0 |
| Delaware | 20.9 | 21.2 | -1.4 |
| District of Columbia | 30.0 | 26.5 | +13.2** |
| Florida | 24.2 | 23.9 | +1.3 |
| Georgia | 23.5 | 23.2 | +1.3 |
| Hawaii 2/ | 21.7 | 22.7 | -4.4 |
| Idaho | 22.7 | 22.4 | +1.3 |
| Illinois | 22.2 | 22.1 | +0.5 |
| Indiana | 22.6 | 23.3 | -3.0 |
| Iowa | 21.4 | 20.9 | +2.4 |
| Kansas | 21.6 | 22.5 | -4.0 |
| Kentucky | 26.5 | 28.1 | -5.7** |
| Louisiana | 22.8 | 23.0 | -0.9 |
| Maine | 25.9 | 24.7 | +4.9 |
| Maryland | 22.6 | 22.3 | +1.3 |
| Massachusetts | 21.6 | 22.1 | -2.3 |
| Michigan | 22.7 | 23.2 | -2.2 |
| Minnesota | 21.8 | 21.8 | 0 |
| Mississippi | 25.4 | 26.0 | -2.3 |
| Missouri | 22.0 | 23.1 | -4.8** |
| Montana | 23.7 | 23.4 | +1.3 |
| Nebraska | 22.4 | 22.3 | +0.4 |
| Nevada | 28.8 | 26.7 | +7.9 |
| New Hampshire | 23.7 | 24.1 | -1.7 |
| New Jersey | 21.4 | 21.4 | 0 |
| New Mexico | 30.9 | 37.0 | -16.5** |
| New York | 21.6 | 21.9 | -1.4 |
| North Carolina | 23.4 | 22.5 | +4.0* |
| North Dakota | 23.2 | 24.0 | -3.3 |
| Ohio | 22.6 | 23.1 | -2.2* |
| Oklahoma | 22.7 | 23.9 | -5.0* |
| Oregon | 23.2 | 22.4 | +3.6 |
| Pennsylvania | 22.4 | 22.7 | -1.3 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 22.1 | 23.1 | -4.3 |
| South Carolina | 23.3 | 23.7 | -1.7 |
| South Dakota | 22.5 | 22.3 | +0.9 |
| Tennessee | 25.9 | 25.9 | 0 |
| Texas | 26.0 | 28.0 | -7.2** |
| Utah | 20.0 | 20.6 | -2.9 |
| Vermont | 24.4 | 25.2 | -3.2 |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 24.4 | 24.7 | -1.2 |
| Washington | 23.0 | 23.0 | 0 |
| West Virginia | 26.0 | 26.5 | -1.9 |
| Wisconsin | 22.3 | 22.0 | +1.4 |
| Wyoming | 26.7 | 26.6 | +0.4 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

Table 10b. INFANT MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

NONWHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 43.4 | 42.9 | +1.2* |
| Alabama | 46.2 | 43.6 | +6.0** |
| Alaska 2/ | 65.9 | 72.7 | -9.4 |
| Arizona | 56.8 | 74.2 | -23.5** |
| Arkansas | 38.3 | 36.1 | +6.1 |
| California | 31.0 | 31.1 | -0.3 |
| Colorado | 39.5 | 39.0 | +1.3 |
| Connecticut | 45.5 | 44.1 | +3.2 |
| Delaware | 46.6 | 45.6 | +2.2 |
| District of Columbia | 40.1 | 37.0 | +8.4* |
| Florida | 47.4 | 50.0 | -5.2** |
| Georgia | 45.9 | 43.6 | +5.3** |
| Hawaii 2/ | 23.5 | 22.3 | +5.4 |
| Idaho | 37.7 | 50.2 | -24.9 |
| Illinois | 38.5 | 41.9 | -8.1** |
| Indiana | 38.9 | 41.5 | -6.3 |
| Iowa | 39.5 | 48.9 | -17.5 |
| Kansas | 34.9 | 38.6 | -9.6 |
| Kentucky | 44.6 | 45.7 | -2.4 |
| Louisiana | 47.6 | 43.8 | +8.7** |
| Maine | 22.4 | 38.6 | -42.0* |
| Maryland | 44.7 | 44.8 | -0.2 |
| Massachusetts | 35.4 | 36.0 | -1.7 |
| Michigan | 36.2 | 36.5 | -0.8 |
| Minnesota | 30.1 | 37.4 | -19.5* |
| Mississippi | 52.1 | 46.0 | +13.3** |
| Missouri | 44.2 | 41.6 | +6.3* |
| Montana | 44.8 | 55.1 | -18.7* |
| Nebraska | 40.3 | 51.4 | -21.6** |
| Nevada | 43.2 | 57.6 | -25.0** |
| New Hampshire | 23.3 | 42.2 | -44.8 |
| New Jersey | 43.3 | 44.9 | -3.6 |
| New Mexico | 52.7 | 70.2 | -24.9** |
| New York | 41.9 | 40.0 | +4.8** |
| North Carolina | 50.0 | 46.5 | +7.5** |
| North Dakota | 48.6 | 59.3 | -18.1 |
| Ohio | 39.8 | 40.5 | -1.7 |
| Oklahoma | 41.1 | 45.1 | -8.9* |
| Oregon | 36.1 | 41.1 | -12.2 |
| Pennsylvania | 43.7 | 42.7 | +2.3 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 38.8 | 41.4 | -6.3 |
| South Carolina | 48.2 | 44.3 | +8.8** |
| South Dakota | 65.2 | 75.1 | -13.2 |
| Tennessee | 44.2 | 40.3 | +9.7** |
| Texas | 44.3 | 42.9 | +3.3 |
| Utah | 44.3 | 48.8 | -9.2 |
| Vermont | 11.9 | 20.8 | -42.8 |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 46.7 | 45.2 | +3.3 |
| Washington | 41.2 | 46.7 | -11.8* |
| West Virginia | 35.4 | 36.4 | -2.8 |
| Wisconsin | 37.0 | 41.9 | -11.7* |
| Wyoming | 50.7 | 78.2 | -35.2** |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

Table 11. NEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

TOTAL INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 18.9 | 19.0 | -0.5** |
| Alabama | 21.4 | 22.0 | -2.7 |
| Alaska 2/ | 23.6 | 21.8 | +8.3 |
| Arizona | 19.9 | 20.5 | -2.9 |
| Arkansas | 17.4 | 17.2 | +1.2 |
| California | 17.6 | 18.1 | -2.8** |
| Colorado | 21.2 | 22.0 | -3.6 |
| Connecticut | 17.6 | 17.3 | +1.7 |
| Delaware | 18.6 | 18.4 | +1.1 |
| District of Columbia | 28.1 | 25.6 | +9.8** |
| Florida | 21.3 | 21.6 | -1.4 |
| Georgia | 20.7 | 20.5 | +1.0 |
| Hawaii 2/ | 18.0 | 17.2 | +4.7 |
| Idaho | 17.2 | 17.0 | +1.2 |
| Illinois | 18.0 | 18.2 | -1.1 |
| Indiana | 17.5 | 18.2 | -3.9* |
| Iowa | 16.6 | 16.3 | +1.8 |
| Kansas | 17.2 | 17.9 | -3.9 |
| Kentucky | 19.7 | 20.3 | -3.0 |
| Louisiana | 22.7 | 21.9 | +3.7* |
| Maine | 18.5 | 17.6 | +5.1 |
| Maryland | 20.2 | 19.8 | +2.0 |
| Massachusetts | 16.7 | 17.5 | -4.6** |
| Michigan | 18.4 | 18.6 | -1.1** |
| Minnesota | 16.4 | 16.8 | -2.4 |
| Mississippi | 24.4 | 23.3 | +4.7** |
| Missouri | 18.5 | 18.5 | 0 |
| Montana | 17.5 | 17.8 | -1.7 |
| Nebraska | 17.7 | 17.9 | -1.1 |
| Nevada | 22.0 | 21.7 | +1.4 |
| New Hampshire | 18.0 | 18.1 | -0.6 |
| New Jersey | 18.6 | 18.2 | +2.2 |
| New Mexico | 21.0 | 23.3 | -9.9** |
| New York | 18.4 | 18.3 | +0.5 |
| North Carolina | 20.7 | 19.8 | +4.5** |
| North Dakota | 18.4 | 18.9 | -2.7 |
| Ohio | 18.7 | 18.8 | -0.5 |
| Oklahoma | 18.2 | 19.2 | -5.2* |
| Oregon | 16.8 | 16.6 | +1.2 |
| Pennsylvania | 19.0 | 18.9 | +0.5 |
| Puerto Rico 2/ | 24.6 | 25.7 | -4.3* |
| Rhode Island | 16.8 | 18.3 | -8.2* |
| South Carolina | 20.1 | 20.4 | -1.5 |
| South Dakota | 17.7 | 17.6 | +0.6 |
| Tennessee | 20.8 | 20.3 | +2.5 |
| Texas | 19.6 | 20.1 | -2.5** |
| Utah | 15.4 | 16.0 | -3.8 |
| Vermont | 18.3 | 19.2 | -4.7 |
| Virgin Islands 2/ | 25.8 | 28.1 | -8.2 |
| Virginia | 21.1 | 21.6 | -2.3 |
| Washington | 17.5 | 17.7 | -1.1 |
| West Virginia | 18.6 | 19.1 | -2.6 |
| Wisconsin | 17.2 | 17.1 | +0.6 |
| Wyoming | 20.6 | 20.9 | -1.4 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

Table 11a. NEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

WHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 17.4 | 17.6 | -1.1** |
| Alabama | 18.2 | 18.8 | -3.2 |
| Alaska 2/ | 20.7 | 19.7 | +5.1 |
| Arizona | 19.2 | 19.4 | -1.0 |
| Arkansas | 16.2 | 16.1 | +0.6 |
| California | 17.0 | 17.6 | -3.4** |
| Colorado | 21.0 | 21.8 | -3.7 |
| Connecticut | 16.4 | 16.5 | -0.6 |
| Delaware | 16.2 | 16.0 | +1.3 |
| District of Columbia | 24.4 | 21.9 | +11.4* |
| Florida | 18.7 | 18.6 | +0.5 |
| Georgia | 17.9 | 17.7 | +1.1 |
| Hawaii 2/ | 17.6 | 18.2 | -3.3 |
| Idaho | 17.2 | 16.9 | +1.8 |
| Illinois | 16.6 | 16.6 | 0 |
| Indiana | 16.7 | 17.3 | -3.5* |
| Iowa | 16.4 | 16.1 | +1.9 |
| Kansas | 16.7 | 17.3 | -3.5 |
| Kentucky | 18.9 | 19.7 | -4.1* |
| Louisiana | 17.9 | 18.0 | -0.6 |
| Maine | 18.5 | 17.6 | +5.1 |
| Maryland | 17.3 | 17.0 | +1.8 |
| Massachusetts | 16.4 | 17.3 | -5.2** |
| Michigan | 17.4 | 17.6 | -1.1 |
| Minnesota | 16.4 | 16.8 | -2.4 |
| Mississippi | 19.5 | 20.4 | -4.4 |
| Missouri | 16.6 | 17.1 | -2.9 |
| Montana | 17.2 | 17.5 | -1.7 |
| Nebraska | 17.4 | 17.4 | 0 |
| Nevada | 21.9 | 20.2 | +8.4 |
| New Hampshire | 18.0 | 18.1 | -0.6 |
| New Jersey | 16.7 | 16.6 | +0.6 |
| New Mexico | 20.8 | 23.0 | -9.6** |
| New York | 16.5 | 16.8 | -1.8 |
| North Carolina | 17.7 | 16.7 | +6.0** |
| North Dakota | 18.1 | 18.7 | -3.2 |
| Ohio | 17.4 | 17.6 | -1.1 |
| Oklahoma | 17.1 | 18.2 | -6.1* |
| Oregon | 16.6 | 16.3 | +1.8 |
| Pennsylvania | 17.4 | 17.6 | -1.1 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 16.4 | 17.9 | -8.4* |
| South Carolina | 16.9 | 17.7 | -4.5 |
| South Dakota | 16.9 | 17.0 | -0.6 |
| Tennessee | 19.0 | 18.8 | +1.1 |
| Texas | 18.2 | 19.0 | -4.2** |
| Utah | 15.3 | 15.9 | -3.8 |
| Vermont | 18.3 | 19.2 | -4.7 |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 18.4 | 18.9 | -2.7 |
| Washington | 17.1 | 17.2 | -0.6 |
| West Virginia | 18.6 | 18.8 | -1.1 |
| Wisconsin | 16.9 | 16.7 | +1.2 |
| Wyoming | 20.3 | 20.5 | -1.0 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

Table 11b. NEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES, EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

NONWHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 27.4 | 27.3 | +0.4 |
| Alabama | 26.9 | 27.2 | -1.1 |
| Alaska 2/ | 29.7 | 27.4 | +8.4 |
| Arizona | 23.7 | 27.0 | -12.2* |
| Arkansas | 20.0 | 19.8 | +1.0 |
| California | 22.8 | 23.1 | -1.3 |
| Colorado | 28.5 | 27.4 | +4.0 |
| Connecticut | 35.0 | 32.2 | +8.7 |
| Delaware | 29.2 | 29.9 | -2.4 |
| District of Columbia | 29.8 | 28.3 | +5.3 |
| Florida | 28.3 | 29.4 | -3.8 |
| Georgia | 25.7 | 25.4 | +1.2 |
| Hawaii 2/ | 18.2 | 16.8 | +8.3 |
| Idaho | 18.4 | 22.1 | -16.8 |
| Illinois | 25.2 | 28.0 | -10.0** |
| Indiana | 26.5 | 28.8 | -8.0 |
| Iowa | 27.4 | 33.0 | -17.0 |
| Kansas | 23.4 | 27.3 | -14.3 |
| Kentucky | 28.5 | 27.8 | +2.5 |
| Louisiana | 30.1 | 27.9 | +7.9** |
| Maine | 15.2 | 25.3 | -39.9 |
| Maryland | 30.3 | 29.9 | +1.3 |
| Massachusetts | 24.8 | 25.8 | -3.9 |
| Michigan | 26.6 | 27.0 | -1.5 |
| Minnesota | 17.8 | 22.2 | -19.8 |
| Mississippi | 28.6 | 25.5 | +12.2** |
| Missouri | 30.1 | 28.3 | +6.4 |
| Montana | 21.4 | 22.9 | -6.6 |
| Nebraska | 25.0 | 30.9 | -19.1 |
| Nevada | 22.4 | 34.1 | -34.3** |
| New Hampshire | 20.0 | 24.1 | -17.0 |
| New Jersey | 31.1 | 30.7 | +1.3 |
| New Mexico | 22.8 | 26.0 | -12.3 |
| New York | 30.8 | 30.2 | +2.0 |
| North Carolina | 27.3 | 26.1 | +4.6* |
| North Dakota | 26.1 | 28.4 | -8.1 |
| Ohio | 29.9 | 29.8 | +0.3 |
| Oklahoma | 25.1 | 26.0 | -3.5 |
| Oregon | 20.3 | 25.1 | -19.1 |
| Pennsylvania | 32.4 | 31.9 | +1.6 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 27.2 | 30.1 | -9.6 |
| South Carolina | 24.4 | 23.8 | +2.5 |
| South Dakota | 27.8 | 27.7 | +0.4 |
| Tennessee | 27.4 | 25.9 | +5.8 |
| Texas | 27.4 | 26.7 | +2.6 |
| Utah | 19.8 | 22.9 | -13.5 |
| Vermont | 11.9 | 10.4 | +14.4 |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 29.3 | 29.4 | -0.4 |
| Washington | 24.5 | 26.4 | -7.2 |
| West Virginia | 19.9 | 24.4 | -18.5* |
| Wisconsin | 25.4 | 26.7 | -4.9 |
| Wyoming | 28.5 | 34.2 | -16.7 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

Table 12. POSTNEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

TOTAL INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 7.3 | 7.3 | 0 |
| Alabama | 11.3 | 10.1 | +11.9** |
| Alaska 2/ | 12.5 | 16.2 | -22.8** |
| Arizona | 12.2 | 15.0 | -18.7** |
| Arkansas | 9.6 | 9.3 | +3.2 |
| California | 6.1 | 5.9 | +3.4 |
| Colorado | 7.0 | 8.1 | -13.6** |
| Connecticut | 4.8 | 4.6 | +4.3 |
| Delaware | 7.1 | 7.0 | +1.4 |
| District of Columbia | 8.8 | 6.9 | +27.5** |
| Florida | 9.2 | 9.5 | -3.2 |
| Georgia | 10.8 | 10.1 | +6.9** |
| Hawaii 2/ | 4.9 | 5.2 | -5.8 |
| Idaho | 5.8 | 5.9 | -1.7 |
| Illinois | 6.8 | 6.7 | +1.5 |
| Indiana | 6.4 | 6.5 | -1.5 |
| Iowa | 5.1 | 4.9 | +4.1 |
| Kansas | 5.3 | 5.5 | -3.6 |
| Kentucky | 8.3 | 9.2 | -9.8** |
| Louisiana | 9.8 | 9.3 | +5.4* |
| Maine | 7.3 | 7.2 | +1.4 |
| Maryland | 7.3 | 7.4 | -1.4 |
| Massachusetts | 5.3 | 5.0 | +6.0* |
| Michigan | 5.8 | 6.1 | -4.9 |
| Minnesota | 5.5 | 5.2 | +5.8 |
| Mississippi | 15.4 | 13.8 | +11.6** |
| Missouri | 6.6 | 6.9 | -4.4 |
| Montana | 7.6 | 7.5 | +1.3 |
| Nebraska | 5.4 | 5.5 | -1.8 |
| Nevada | 8.6 | 8.4 | +2.4 |
| New Hampshire | 5.8 | 6.1 | -4.9 |
| New Jersey | 5.7 | 5.8 | -1.7 |
| New Mexico | 12.2 | 16.9 | -27.8** |
| New York | 5.9 | 5.6 | +5.4** |
| North Carolina | 11.2 | 10.7 | +4.7* |
| North Dakota | 5.8 | 6.0 | -3.3 |
| Ohio | 5.7 | 6.1 | -6.6** |
| Oklahoma | 7.0 | 7.3 | -4.1 |
| Oregon | 6.9 | 6.3 | +9.5 |
| Pennsylvania | 5.6 | 5.7 | -1.8 |
| Puerto Rico 2/ | 21.8 | 29.0 | -24.8** |
| Rhode Island | 6.0 | 5.4 | +11.1 |
| South Carolina | 13.8 | 12.3 | +12.2** |
| South Dakota | 7.9 | 7.6 | +3.9 |
| Tennessee | 9.1 | 8.7 | +4.6 |
| Texas | 9.1 | 10.0 | -9.0** |
| Utah | 5.1 | 5.2 | -1.9 |
| Vermont | 6.0 | 6.0 | 0 |
| Virgin Islands 2/ | 15.6 | 22.3 | -30.1* |
| Virginia | 8.9 | 8.4 | +6.0* |
| Washington | 6.6 | 6.4 | +3.1 |
| West Virginia | 7.8 | 7.9 | -1.3 |
| Wisconsin | 5.6 | 5.6 | 0 |
| Wyoming | 6.9 | 7.4 | -6.8 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

Table 12a. POSTNEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

WHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 5.7 | 5.9 | -3.4** |
| Alabama | 6.4 | 6.1 | +4.9 |
| Alaska 2/ | 5.1 | 5.4 | -5.6 |
| Arizona | 8.3 | 9.4 | -11.7** |
| Arkansas | 5.8 | 6.2 | -6.5 |
| California | 5.8 | 5.7 | +1.8 |
| Colorado | 6.9 | 8.0 | -13.8** |
| Connecticut | 4.4 | 4.2 | +4.8 |
| Delaware | 4.7 | 5.2 | -9.6 |
| District of Columbia | 5.6 | 4.6 | +21.7 |
| Florida | 5.5 | 5.3 | +3.8 |
| Georgia | 5.6 | 5.5 | +1.8 |
| Hawaii 2/ | 2.1 | 4.6 | -54.4** |
| Idaho | 5.5 | 5.5 | 0 |
| Illinois | 5.6 | 5.5 | +1.8 |
| Indiana | 5.9 | 6.0 | -1.7 |
| Iowa | 5.0 | 4.8 | +4.2 |
| Kansas | 4.8 | 5.2 | -7.7 |
| Kentucky | 7.6 | 8.4 | -9.5** |
| Louisiana | 4.9 | 5.0 | -2.0 |
| Maine | 7.3 | 7.2 | +1.4 |
| Maryland | 5.3 | 5.3 | 0 |
| Massachusetts | 5.1 | 4.8 | +6.3 |
| Michigan | 5.4 | 5.6 | -3.6* |
| Minnesota | 5.3 | 5.0 | +6.0 |
| Mississippi | 5.9 | 5.5 | +7.3 |
| Missouri | 5.4 | 6.0 | -10.0** |
| Montana | 6.5 | 5.9 | +10.2 |
| Nebraska | 5.0 | 4.9 | +2.0 |
| Nevada | 6.9 | 6.5 | +6.2 |
| New Hampshire | 5.8 | 6.1 | -4.9 |
| New Jersey | 4.7 | 4.8 | -2.1 |
| New Mexico | 10.1 | 14.0 | -27.9** |
| New York | 5.1 | 5.1 | 0 |
| North Carolina | 5.8 | 5.8 | 0 |
| North Dakota | 5.1 | 5.3 | -3.8 |
| Ohio | 5.2 | 5.5 | -5.5** |
| Oklahoma | 5.5 | 5.6 | -1.8** |
| Oregon | 6.6 | 6.0 | +10.0 |
| Pennsylvania | 5.0 | 5.2 | -3.9 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 5.7 | 5.2 | +9.6 |
| South Carolina | 6.4 | 6.0 | +6.7 |
| South Dakota | 5.6 | 5.3 | +5.7 |
| Tennessee | 6.9 | 7.1 | -2.8 |
| Texas | 7.8 | 8.9 | -12.4** |
| Utah | 4.7 | 4.8 | -2.1 |
| Vermont | 6.0 | 6.0 | 0 |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 6.0 | 5.8 | +3.4 |
| Washington | 6.0 | 5.7 | +5.3 |
| West Virginia | 7.4 | 7.7 | -3.9 |
| Wisconsin | 5.4 | 5.3 | +1.9 |
| Wyoming | 6.3 | 6.2 | +1.6 |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

TABLE 12b. POSTNEONATAL MORTALITY AVERAGE ANNUAL RATES: UNITED STATES EACH STATE AND SPECIFIED AREAS, 1958-61 AND 1954-57

(By place of residence. Exclusive of fetal deaths)

NONWHITE INFANTS

| STATE | RATE PER 1,000 LIVE BIRTHS | | Percent change 1958-61 from 1954-57 |
|---|---|---|---|
| | 1958-1961 | 1954-1957 | |
| UNITED STATES 1/ | 16.0 | 15.6 | +2.6** |
| Alabama | 19.4 | 16.4 | +18.3** |
| Alaska 2/ | 36.3 | 45.3 | -19.9** |
| Arizona | 33.1 | 47.2 | -29.9** |
| Arkansas | 18.3 | 16.3 | +12.3* |
| California | 8.2 | 8.0 | +2.5 |
| Colorado | 11.0 | 11.6 | -5.2 |
| Connecticut | 10.4 | 11.9 | -12.6 |
| Delaware | 17.5 | 15.6 | +12.2 |
| District of Columbia | 10.2 | 8.7 | +17.2* |
| Florida | 19.2 | 20.5 | -6.4* |
| Georgia | 20.1 | 18.2 | +10.4** |
| Hawaii 2/ | 5.3 | 5.5 | -3.6 |
| Idaho | 19.2 | 28.1 | -31.7 |
| Illinois | 13.3 | 13.9 | -4.3 |
| Indiana | 12.5 | 12.6 | -0.8 |
| Iowa | 12.0 | 15.0 | -20.0 |
| Kansas | 11.5 | 11.3 | +1.8 |
| Kentucky | 16.2 | 18.0 | -10.0 |
| Louisiana | 17.5 | 15.9 | +10.1** |
| Maine | 7.2 | 13.4 | -46.3 |
| Maryland | 14.3 | 14.9 | -4.0 |
| Massachusetts | 10.6 | 10.2 | +3.9 |
| Michigan | 9.7 | 9.5 | +2.1 |
| Minnesota | 12.3 | 15.2 | -19.1 |
| Mississippi | 23.5 | 20.4 | +15.2** |
| Missouri | 14.2 | 13.2 | +7.6 |
| Montana | 23.4 | 32.2 | -27.3* |
| Nebraska | 15.3 | 20.5 | -25.4* |
| Nevada | 20.8 | 23.6 | -11.9 |
| New Hampshire | 3.3 | 18.1 | -81.8 |
| New Jersey | 12.1 | 14.2 | -14.8** |
| New Mexico | 29.8 | 44.3 | -32.7** |
| New York | 11.2 | 9.8 | +14.3** |
| North Carolina | 22.7 | 20.4 | +11.3** |
| North Dakota | 22.4 | 31.0 | -27.8 |
| Ohio | 9.9 | 10.8 | -8.3 |
| Oklahoma | 16.1 | 19.1 | -15.7** |
| Oregon | 15.9 | 16.1 | -1.3 |
| Pennsylvania | 11.3 | 10.8 | +4.6 |
| Puerto Rico 3/ | --- | --- | --- |
| Rhode Island | 11.6 | 11.3 | +2.7 |
| South Carolina | 23.8 | 20.5 | +16.1** |
| South Dakota | 37.4 | 47.5 | -21.3* |
| Tennessee | 16.9 | 14.5 | +16.6** |
| Texas | 16.9 | 16.3 | +3.7 |
| Utah | 24.5 | 25.9 | -5.4 |
| Vermont | - | 10.4 | - |
| Virgin Islands 3/ | --- | --- | --- |
| Virginia | 17.4 | 15.8 | +10.1** |
| Washington | 15.5 | 12.0 | +29.2* |
| West Virginia | 16.8 | 20.3 | -17.3* |
| Wisconsin | 11.6 | 15.3 | -24.2** |
| Wyoming | 22.2 | 44.1 | -49.7** |

*Statistically significant change. Double asterisk indicates highly significant change from a statistical standpoint.

1/Exclusive of; Alaska prior to 1959, Hawaii prior to 1960, and of Puerto Rico and Virgin Islands.

2/Data for Puerto Rico and Virgin Islands are by place of occurrence; for Alaska, by place of occurrence prior to 1959; for Hawaii, by place of occurrence prior to 1960.

3/Data by color not available.

Table 13. INFANT MORTALITY RATE IN URBAN AND RURAL AREAS OF METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND PERCENT CHANGE IN RATE, SELECTED YEARS, BY AGE, AND COLOR: UNITED STATES, 1950-61 1/

(By place of residence)

TOTAL INFANTS

| AGE, URBAN AND RURAL AREAS IN COUNTY GROUPS | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| Infant (under 1 year)--- | 29.2 | 28.4 | 28.4 | 27.8 | 26.6 | 26.4 | 26.0 | 26.3 | 27.1 | 26.4 | 26.0 | 25.3 | -2.7 | -1.5 | -9.6 | -11.0 |
| Urban-- | 28.4 | --- | --- | 27.6 | 26.8 | 26.6 | 26.6 | 27.1 | 27.5 | 27.0 | 26.3 | 25.5 | -3.1 | -1.1 | -6.3 | -7.4 |
| Rural-- | 30.4 | --- | --- | 28.1 | 26.3 | 26.2 | 25.1 | 25.3 | 26.4 | 25.5 | 25.7 | 24.9 | -3.1 | -1.9 | -13.8 | -15.5 |
| Metropolitan---------- | 26.4 | 25.9 | 26.1 | 25.8 | 25.3 | 25.0 | 24.9 | 25.4 | 26.1 | 25.3 | 24.9 | 24.4 | -2.0 | -0.4 | -5.3 | -5.7 |
| Urban-- | 26.5 | --- | --- | 26.2 | 25.9 | 25.7 | 26.0 | 26.6 | 27.1 | 26.6 | 25.8 | 25.0 | -3.1 | +0.4 | -3.0 | -2.7 |
| Rural-- | 26.4 | --- | --- | 24.1 | 23.2 | 22.9 | 21.6 | 21.9 | 23.0 | 21.8 | 22.5 | 22.0 | -2.2 | -1.8 | -13.3 | -14.8 |
| Nonmetropolitan------- | 32.6 | 31.7 | 31.6 | 30.5 | 28.4 | 28.4 | 27.6 | 27.8 | 28.6 | 28.0 | 28.0 | 26.9 | -3.9 | -1.4 | -12.9 | -14.1 |
| Urban-- | 33.8 | --- | --- | 31.4 | 29.3 | 29.1 | 28.3 | 28.5 | 28.6 | 28.1 | 27.9 | 27.2 | -2.5 | -4.1 | -13.9 | -17.5 |
| Rural-- | 32.0 | --- | --- | 30.0 | 27.9 | 27.9 | 27.2 | 27.4 | 28.6 | 27.9 | 28.0 | 26.8 | -4.3 | +0.4 | -12.8 | -12.5 |
| Neonatal (under 28 days)---------- | 20.5 | 20.0 | 19.8 | 19.6 | 19.1 | 19.1 | 18.9 | 19.1 | 19.5 | 19.0 | 18.7 | 18.4 | -1.6 | -2.1 | -6.8 | -8.8 |
| Urban-- | 21.2 | --- | --- | 20.3 | 20.1 | 20.0 | 20.1 | 20.3 | 20.5 | 20.1 | 19.5 | 19.1 | -2.1 | -2.5 | -5.7 | -8.0 |
| Rural-- | 19.5 | --- | --- | 18.3 | 17.6 | 17.7 | 17.2 | 17.2 | 17.9 | 17.4 | 17.4 | 17.1 | -1.7 | -1.7 | -9.2 | -10.8 |
| Metropolitan---------- | 19.8 | 19.4 | 19.2 | 19.1 | 19.0 | 19.0 | 18.9 | 19.2 | 19.6 | 19.0 | 18.6 | 18.3 | -1.6 | -2.1 | -4.1 | -6.1 |
| Urban-- | 20.2 | --- | --- | 19.8 | 19.7 | 19.7 | 19.8 | 20.2 | 20.5 | 20.1 | 19.3 | 18.9 | -2.1 | -2.0 | -2.5 | -4.5 |
| Rural-- | 18.2 | --- | --- | 16.8 | 16.7 | 16.8 | 15.9 | 16.1 | 16.8 | 16.0 | 16.4 | 16.2 | -1.2 | -2.4 | -7.7 | -9.9 |
| Nonmetropolitan------- | 21.4 | 20.9 | 20.6 | 20.1 | 19.2 | 19.3 | 19.0 | 18.9 | 19.3 | 19.1 | 18.9 | 18.6 | -1.6 | -2.1 | -9.8 | -11.7 |
| Urban-- | 24.0 | --- | --- | 21.9 | 21.1 | 21.0 | 20.6 | 20.5 | 20.5 | 20.2 | 20.2 | 19.9 | -1.5 | -3.8 | -12.5 | -15.8 |
| Rural-- | 20.0 | --- | --- | 19.0 | 18.0 | 18.2 | 17.9 | 17.9 | 18.5 | 18.3 | 18.1 | 17.7 | -2.2 | -0.6 | -9.0 | -9.5 |
| Postneonatal (1-11 months)-------- | 8.7 | 8.4 | 8.6 | 8.2 | 7.5 | 7.3 | 7.1 | 7.2 | 7.6 | 7.4 | 7.3 | 6.9 | -5.5 | 0 | -16.1 | -16.1 |
| Urban-- | 7.2 | --- | --- | 7.3 | 6.7 | 6.6 | 6.5 | 6.8 | 7.0 | 6.9 | 6.8 | 6.4 | -5.9 | +3.0 | -8.3 | -5.6 |
| Rural-- | 11.0 | --- | --- | 9.8 | 8.7 | 8.5 | 7.9 | 8.1 | 8.6 | 8.1 | 8.3 | 7.8 | -6.0 | -2.4 | -22.7 | -24.6 |
| Metropolitan---------- | 6.7 | 6.5 | 6.8 | 6.7 | 6.3 | 6.0 | 6.0 | 6.2 | 6.5 | 6.3 | 6.3 | 6.1 | -3.2 | +5.0 | -10.5 | -6.0 |
| Urban-- | 6.3 | --- | --- | 6.4 | 6.2 | 6.0 | 6.2 | 6.4 | 6.6 | 6.9 | 6.5 | 6.1 | -6.2 | +8.3 | -4.8 | +3.2 |
| Rural-- | 8.2 | --- | --- | 7.3 | 6.5 | 6.1 | 5.7 | 5.8 | 6.2 | 5.8 | 6.1 | 6.0 | -1.6 | 0 | -25.6 | -25.6 |
| Nonmetropolitan------- | 11.2 | 10.8 | 11.0 | 10.4 | 9.2 | 9.1 | 8.6 | 8.9 | 9.3 | 8.9 | 9.1 | 8.3 | -8.8 | 0 | -18.8 | -18.8 |
| Urban-- | 9.8 | --- | --- | 9.5 | 8.2 | 8.1 | 7.7 | 8.0 | 8.1 | 7.9 | 7.7 | 7.3 | -5.2 | -4.9 | -17.4 | -21.4 |
| Rural-- | 12.0 | --- | --- | 11.0 | 9.9 | 9.7 | 9.3 | 9.5 | 10.1 | 9.6 | 9.9 | 9.1 | -8.1 | +2.1 | -19.2 | -17.5 |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 13a. INFANT MORTALITY RATE IN URBAN AND RURAL AREAS OF METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND PERCENT CHANGE IN RATE, SELECTED YEARS, BY AGE, AND COLOR: UNITED STATES, 1950-61 1/

(By place of residence)

WHITE INFANTS

| AGE, URBAN AND RURAL AREAS IN COUNTY GROUPS | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| Infant (under 1 year)--- | 26.8 | 25.8 | 25.5 | 25.0 | 23.9 | 23.6 | 23.2 | 23.3 | 23.8 | 23.2 | 22.9 | 22.4 | -2.2 | -3.0 | -12.0 | -14.6 |
| Urban-- | 26.3 | --- | --- | 25.1 | 24.2 | 23.8 | 23.8 | 23.9 | 24.1 | 23.8 | 23.2 | 22.7 | -2.2 | -2.5 | -9.5 | -11.8 |
| Rural-- | 27.6 | --- | --- | 24.9 | 23.3 | 23.4 | 22.4 | 22.4 | 23.3 | 22.5 | 22.4 | 22.1 | -1.3 | -4.3 | -15.2 | -18.9 |
| Metropolitan---------- | 24.5 | 23.9 | 23.9 | 23.6 | 23.0 | 22.6 | 22.4 | 22.6 | 23.1 | 22.5 | 22.2 | 21.8 | -1.8 | -1.8 | -7.8 | -9.4 |
| Urban-- | 24.4 | --- | --- | 23.9 | 23.3 | 22.9 | 23.2 | 23.3 | 23.7 | 23.3 | 22.7 | 22.2 | -2.2 | -0.9 | -6.2 | -7.0 |
| Rural-- | 24.9 | --- | --- | 22.8 | 22.0 | 21.8 | 20.4 | 20.7 | 21.7 | 20.5 | 20.8 | 20.9 | +0.5 | -4.6 | -12.5 | -16.5 |
| Nonmetropolitan------- | 29.7 | 28.4 | 27.7 | 27.0 | 25.1 | 25.0 | 24.3 | 24.4 | 24.8 | 24.3 | 24.1 | 23.5 | -2.5 | -3.6 | -15.8 | -18.9 |
| Urban-- | 31.3 | --- | --- | 28.4 | 26.6 | 26.2 | 25.4 | 25.5 | 25.4 | 24.9 | 24.7 | 24.3 | -1.6 | -5.7 | -16.3 | -21.1 |
| Rural-- | 28.7 | --- | --- | 26.1 | 24.1 | 24.3 | 23.7 | 23.7 | 24.4 | 23.9 | 23.7 | 23.0 | -3.0 | -2.5 | -15.3 | -17.4 |
| Neonatal (under 28 days)---------- | 19.4 | 18.9 | 18.5 | 18.3 | 17.8 | 17.7 | 17.5 | 17.5 | 17.8 | 17.5 | 17.2 | 16.9 | -1.8 | -2.8 | -8.8 | -11.4 |
| Urban-- | 20.0 | --- | --- | 19.0 | 18.6 | 18.1 | 18.4 | 18.5 | 18.5 | 18.3 | 17.9 | 17.5 | -2.2 | -1.1 | -9.5 | -10.5 |
| Rural-- | 18.4 | --- | --- | 17.1 | 16.5 | 16.2 | 16.1 | 16.2 | 16.7 | 16.3 | 16.3 | 16.1 | -1.2 | +0.6 | -12.0 | -11.4 |
| Metropolitan---------- | 18.6 | 18.2 | 18.0 | 17.9 | 17.7 | 17.5 | 17.3 | 17.4 | 17.7 | 17.3 | 17.0 | 16.7 | -1.8 | -2.9 | -5.9 | -8.6 |
| Urban-- | 18.9 | --- | --- | 18.4 | 18.1 | 17.9 | 18.0 | 18.2 | 18.3 | 18.1 | 17.5 | 17.1 | -2.3 | -2.2 | -5.3 | -7.4 |
| Rural-- | 17.4 | --- | --- | 16.3 | 16.2 | 16.4 | 15.4 | 15.6 | 16.2 | 15.4 | 15.7 | 15.6 | -0.6 | -4.3 | -5.8 | -9.8 |
| Nonmetropolitan------- | 20.4 | 19.8 | 19.2 | 18.8 | 18.0 | 18.1 | 17.7 | 17.7 | 17.9 | 17.7 | 17.6 | 17.3 | -1.7 | -2.8 | -11.3 | -13.7 |
| Urban-- | 22.9 | --- | --- | 20.7 | 20.0 | 19.7 | 19.4 | 19.2 | 19.1 | 18.9 | 18.9 | 18.6 | -1.6 | -4.1 | -14.0 | -17.5 |
| Rural-- | 18.9 | --- | --- | 17.6 | 16.6 | 17.0 | 16.7 | 16.7 | 17.0 | 16.9 | 16.8 | 16.5 | -1.8 | -1.2 | -10.1 | -11.1 |
| Postneonatal (1-11 months)-------- | 7.4 | 6.9 | 7.0 | 6.7 | 6.1 | 5.9 | 5.7 | 5.8 | 6.0 | 5.7 | 5.7 | 5.5 | -3.5 | -3.4 | -20.3 | -23.0 |
| Urban-- | 6.3 | --- | --- | 6.1 | 5.6 | 5.4 | 5.4 | 5.4 | 5.6 | 5.5 | 5.3 | 5.2 | -1.9 | -1.9 | -14.3 | -15.9 |
| Rural-- | 9.2 | --- | --- | 7.8 | 6.8 | 6.6 | 6.3 | 6.2 | 6.6 | 6.2 | 6.1 | 6.0 | -1.6 | -7.6 | -28.3 | -33.7 |
| Metropolitan---------- | 5.9 | 5.7 | 5.9 | 5.7 | 5.3 | 5.1 | 5.1 | 5.2 | 5.4 | 5.2 | 5.2 | 5.1 | -1.9 | +2.0 | -13.6 | -11.9 |
| Urban-- | 5.5 | --- | --- | 5.5 | 5.2 | 5.0 | 5.2 | 5.1 | 5.4 | 5.2 | 5.2 | 5.1 | -1.9 | +4.0 | -9.1 | -5.5 |
| Rural-- | 7.5 | --- | --- | 6.5 | 5.8 | 5.4 | 5.0 | 5.1 | 5.5 | 5.1 | 5.1 | 5.3 | +3.9 | -5.6 | -28.0 | -32.0 |
| Nonmetropolitan------- | 9.3 | 8.6 | 8.5 | 8.2 | 7.1 | 6.9 | 6.6 | 6.7 | 6.9 | 6.6 | 6.5 | 6.2 | -4.6 | -5.8 | -25.8 | -30.1 |
| Urban-- | 8.4 | --- | --- | 7.7 | 6.6 | 6.5 | 6.0 | 6.3 | 6.3 | 6.0 | 5.8 | 5.7 | -1.7 | -10.8 | -22.6 | -31.0 |
| Rural-- | 9.8 | --- | --- | 8.5 | 7.5 | 7.3 | 7.0 | 7.0 | 7.4 | 7.0 | 6.9 | 6.5 | -5.8 | -5.5 | -25.5 | -29.6 |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 13b. INFANT MORTALITY RATE IN URBAN AND RURAL AREAS OF METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND PERCENT CHANGE IN RATE, SELECTED YEARS, BY AGE, AND COLOR: UNITED STATES, 1950-61 1/

(By place of residence)

NONWHITE INFANTS

| AGE, URBAN AND RURAL AREAS IN COUNTY GROUPS | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| Infant (Under 1 year)--- | 44.5 | 44.8 | 47.0 | 44.7 | 42.9 | 42.8 | 42.1 | 43.7 | 45.7 | 44.0 | 43.2 | 40.7 | -5.8 | +0.9 | -3.8 | -2.9 |
| Urban-- | 42.6 | --- | --- | 42.6 | 41.4 | 41.9 | 41.1 | 42.9 | 43.9 | 42.3 | 40.9 | 39.1 | -4.4 | -2.4 | -1.7 | -4.0 |
| Rural-- | 47.0 | --- | --- | 48.0 | 45.4 | 44.5 | 43.8 | 45.3 | 49.5 | 47.7 | 48.5 | 44.6 | -8.1 | +9.0 | -5.3 | +3.2 |
| Metropolitan---------- | 40.0 | 39.9 | 41.2 | 39.8 | 39.4 | 39.5 | 39.1 | 41.3 | 42.4 | 40.7 | 39.5 | 37.7 | -4.6 | 0 | -1.3 | -1.3 |
| Urban-- | 39.5 | --- | --- | 39.6 | 39.3 | 39.8 | 39.3 | 41.4 | 42.4 | 40.6 | 39.1 | 37.6 | -3.8 | -1.8 | +0.8 | -1.0 |
| Rural-- | 44.0 | --- | --- | 41.7 | 40.7 | 37.7 | 38.0 | 40.5 | 42.6 | 41.3 | 42.8 | 38.4 | -10.3 | +13.5 | -14.3 | -2.7 |
| Nonmetropolitan------- | 49.0 | 50.1 | 53.6 | 50.5 | 47.2 | 47.2 | 46.2 | 47.3 | 50.7 | 49.3 | 50.2 | 46.6 | -7.2 | +6.4 | -3.7 | +2.4 |
| Urban-- | 52.9 | --- | --- | 53.6 | 49.0 | 50.1 | 48.3 | 49.0 | 49.9 | 49.2 | 50.0 | 46.6 | -6.8 | -0.2 | -5.3 | -5.5 |
| Rural-- | 47.5 | --- | --- | 49.2 | 46.4 | 45.9 | 45.2 | 46.5 | 51.2 | 49.4 | 50.3 | 46.5 | -7.6 | +9.6 | -3.4 | +5.9 |
| Neonatal (under 28 days)---------- | 27.5 | 27.3 | 28.0 | 27.4 | 27.0 | 27.2 | 27.0 | 27.8 | 29.0 | 27.7 | 26.9 | 26.2 | -2.6 | -1.1 | -1.1 | -2.2 |
| Urban-- | 29.0 | --- | --- | 28.4 | 28.2 | 29.1 | 28.6 | 29.5 | 30.3 | 28.7 | 27.6 | 27.1 | -1.8 | -5.2 | +0.3 | -4.8 |
| Rural-- | 25.5 | --- | --- | 25.6 | 24.7 | 23.8 | 24.0 | 24.4 | 26.3 | 25.5 | 25.1 | 24.3 | -3.2 | +5.5 | -6.7 | -1.6 |
| Metropolitan---------- | 28.1 | 27.5 | 27.7 | 27.3 | 27.5 | 28.0 | 27.9 | 29.1 | 30.0 | 28.2 | 27.1 | 26.5 | -2.2 | -3.2 | -0.4 | -3.6 |
| Urban-- | 28.2 | --- | --- | 27.7 | 28.0 | 28.7 | 28.5 | 29.6 | 30.4 | 28.7 | 27.3 | 26.8 | -1.8 | -4.9 | +1.8 | -3.2 |
| Rural-- | 27.6 | --- | --- | 24.2 | 23.4 | 22.4 | 23.3 | 24.5 | 26.3 | 24.5 | 25.2 | 23.9 | -5.2 | +12.5 | -18.9 | -8.7 |
| Nonmetropolitan------- | 26.9 | 27.2 | 28.4 | 27.5 | 26.3 | 26.1 | 25.8 | 25.9 | 27.5 | 26.8 | 26.5 | 25.7 | -3.0 | +1.5 | -3.0 | -1.5 |
| Urban-- | 31.8 | --- | --- | 31.3 | 29.1 | 30.4 | 29.1 | 28.9 | 29.7 | 28.8 | 29.2 | 28.3 | -3.1 | -4.0 | -4.4 | -8.2 |
| Rural-- | 25.1 | --- | --- | 25.8 | 25.0 | 24.1 | 24.2 | 24.4 | 26.3 | 25.8 | 25.1 | 24.4 | -2.8 | +4.1 | -4.0 | 0 |
| Postneonatal (1-11 months)-------- | 16.9 | 17.5 | 19.0 | 17.3 | 15.9 | 15.6 | 15.1 | 15.9 | 16.7 | 16.3 | 16.3 | 14.5 | -11.1 | +4.5 | -8.2 | -4.1 |
| Urban-- | 13.6 | --- | --- | 14.2 | 13.2 | 12.8 | 12.5 | 13.4 | 13.6 | 13.6 | 13.3 | 12.0 | -9.8 | +3.9 | -5.9 | -2.2 |
| Rural-- | 21.5 | --- | --- | 22.4 | 20.7 | 20.7 | 19.8 | 20.9 | 23.2 | 22.2 | 23.4 | 20.3 | -13.3 | +13.0 | -3.7 | +8.8 |
| Metropolitan---------- | 11.9 | 12.4 | 13.5 | 12.5 | 11.9 | 11.5 | 11.2 | 12.2 | 12.5 | 12.5 | 12.4 | 11.2 | -9.7 | +7.8 | -3.4 | +4.2 |
| Urban-- | 11.3 | --- | --- | 11.9 | 11.3 | 11.1 | 10.8 | 11.8 | 12.0 | 11.9 | 11.8 | 10.8 | -8.5 | +6.3 | -1.8 | +4.4 |
| Rural-- | 16.3 | --- | --- | 17.5 | 17.3 | 15.3 | 14.7 | 16.0 | 16.3 | 16.8 | 17.6 | 14.5 | -17.6 | +15.0 | -6.1 | +8.0 |
| Nonmetropolitan------- | 22.1 | 22.9 | 25.2 | 23.0 | 20.9 | 21.1 | 20.4 | 21.4 | 23.3 | 22.5 | 23.7 | 20.9 | -11.8 | +12.3 | -4.5 | +7.2 |
| Urban-- | 21.1 | --- | --- | 22.3 | 19.9 | 19.7 | 19.2 | 20.1 | 20.2 | 20.4 | 20.8 | 18.3 | -12.0 | +5.6 | -6.6 | -1.4 |
| Rural-- | 22.4 | --- | --- | 23.4 | 21.4 | 21.8 | 21.0 | 22.1 | 24.9 | 23.6 | 25.2 | 22.1 | -12.3 | +15.6 | -2.7 | +12.5 |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 14. INFANT, NEONATAL, AND POSTNEONATAL MORTALITY RATES, IN METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND FOR SPECIFIED AGES; WITH ANNUAL PERCENT CHANGE, BY COLOR: UNITED STATES, 1950-1961 1/

(By place of residence)

TOTAL INFANTS

| AGE AND COUNTY GROUP | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | | ANNUAL PERCENT CHANGE IN RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1958 from 1957 | 1959 from 1958 | 1960 from 1959 | 1961 from 1960 | 1950-1957 |
| Infant (under 1 year)--- | 29.2 | 28.4 | 28.4 | 27.8 | 26.6 | 26.4 | 26.0 | 26.3 | 27.1 | 26.4 | 26.0 | 25.3 | +3.0 | -2.6 | -1.5 | -2.7 | -1.7** |
| Metropolitan---------- | 26.4 | 25.9 | 26.1 | 25.8 | 25.3 | 25.0 | 24.9 | 25.4 | 26.1 | 25.3 | 24.9 | 24.4 | +2.8 | -3.1 | -1.6 | -2.0 | -1.3* |
| Nonmetropolitan------- | 32.6 | 31.7 | 31.6 | 30.5 | 28.4 | 28.4 | 27.6 | 27.8 | 28.6 | 28.0 | 28.0 | 26.9 | +2.9 | -2.1 | 0 | -3.9 | -2.7** |
| Neonatal (under 28 days)---------- | 20.5 | 20.0 | 19.8 | 19.6 | 19.1 | 19.1 | 18.9 | 19.1 | 19.5 | 19.0 | 18.7 | 18.4 | +2.1 | -2.6 | -1.6 | -1.6 | -1.1** |
| Metropolitan---------- | 19.8 | 19.4 | 19.2 | 19.1 | 19.0 | 19.0 | 18.9 | 19.2 | 19.6 | 19.0 | 18.6 | 18.3 | +2.1 | -3.1 | -2.1 | -1.6 | -0.5* |
| Nonmetropolitan------- | 21.4 | 20.9 | 20.6 | 20.1 | 19.2 | 19.3 | 19.0 | 18.9 | 19.3 | 19.1 | 18.9 | 18.6 | +2.1 | -1.0 | -1.1 | -1.6 | -1.9** |
| Under 1 week------ | 17.9 | 17.5 | 17.3 | 17.2 | 16.7 | 16.9 | 16.5 | 16.6 | 17.1 | 16.9 | 16.7 | 16.5 | +3.0 | -1.2 | -1.2 | -1.2 | -1.1** |
| Under 3 days---- | 15.3 | 15.0 | 14.8 | 14.7 | 14.4 | 14.7 | 14.4 | 14.5 | 14.8 | 14.9 | 14.8 | 14.6 | +2.1 | +0.7 | -0.7 | -1.4 | -0.7** |
| Under 1 day--- | 10.2 | 9.8 | 9.7 | 9.7 | 9.6 | 10.0 | 9.9 | 9.9 | 10.2 | 10.3 | 10.3 | 10.3 | +3.0 | +1.0 | 0 | 0 | -0.1 |
| 1 day--------- | 3.1 | 3.1 | 3.0 | 3.0 | 2.9 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 0 | 0 | -3.6 | 0 | -1.6** |
| 2 days-------- | 2.0 | 2.1 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.8 | 1.9 | 1.8 | 1.8 | 1.7 | +5.6 | -5.3 | 0 | -5.6 | -2.8** |
| 3-6 days-------- | 2.6 | 2.5 | 2.5 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.3 | 2.0 | 1.9 | 1.8 | +9.5 | -13.1 | -5.0 | -5.3 | -3.4** |
| 7-27 days--------- | 2.6 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.1 | 2.0 | 1.9 | -4.2 | -8.7 | -4.8 | -5.0 | -1.7* |
| Postneonatal (1-11 months)-------- | 8.7 | 8.4 | 8.6 | 8.2 | 7.5 | 7.3 | 7.1 | 7.2 | 7.6 | 7.4 | 7.3 | 6.9 | +5.6 | -2.6 | -1.4 | -5.5 | -3.3** |
| Metropolitan---------- | 6.7 | 6.5 | 6.9 | 6.7 | 6.3 | 6.0 | 6.0 | 6.2 | 6.5 | 6.3 | 6.3 | 6.1 | +4.8 | -3.1 | 0 | -3.2 | -1.6* |
| Nonmetropolitan------- | 11.2 | 10.8 | 11.0 | 10.4 | 9.2 | 9.1 | 8.6 | 8.9 | 9.3 | 8.9 | 9.1 | 8.3 | +4.5 | -4.3 | +2.2 | -8.8 | -4.2** |
| 1-5 months-------- | 6.0 | 5.8 | 6.0 | 5.8 | 5.2 | 5.2 | 5.0 | 5.4 | 5.6 | 5.4 | 5.4 | 5.2 | +3.7 | -3.6 | 0 | -3.7 | -2.4* |
| 6-11 months------- | 2.7 | 2.5 | 2.6 | 2.5 | 2.2 | 2.2 | 1.9 | 1.9 | 2.0 | 1.9 | 1.9 | 1.8 | +5.3 | -5.0 | 0 | -5.3 | -5.5** |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 14a. INFANT, NEONATAL, AND POSTNEONATAL MORTALITY RATES, IN METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND FOR SPECIFIED AGES; WITH ANNUAL PERCENT CHANGE, BY COLOR: UNITED STATES, 1950-61 1/

(By place of residence)

WHITE INFANTS

| AGE AND COUNTY GROUP | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | | ANNUAL PERCENT CHANGE IN RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1958 from 1957 | 1959 from 1958 | 1960 from 1959 | 1961 from 1960 | 1950-1957 |
| Infant (under 1 year)--- | 26.8 | 25.8 | 25.5 | 25.0 | 23.9 | 23.6 | 23.2 | 23.3 | 23.8 | 23.2 | 22.9 | 22.4 | +2.1 | -2.5 | -1.3 | -2.2 | -2.2** |
| Metropolitan---------- | 24.5 | 23.9 | 23.9 | 23.6 | 23.0 | 22.6 | 22.4 | 22.6 | 23.1 | 22.5 | 22.7 | 21.8 | +2.2 | -2.6 | +0.9 | -4.0 | -1.3** |
| Nonmetropolitan------- | 29.7 | 28.4 | 27.7 | 27.0 | 25.1 | 25.0 | 24.3 | 24.4 | 24.8 | 24.3 | 24.7 | 23.5 | +1.6 | -2.0 | +1.6 | -4.9 | -3.1** |
| Neonatal (under 28 days)---------- | 19.4 | 18.9 | 18.5 | 18.3 | 17.8 | 17.7 | 17.5 | 17.5 | 17.8 | 17.5 | 17.2 | 16.9 | +1.7 | -1.7 | -1.7 | -1.8 | -1.5** |
| Metropolitan---------- | 18.6 | 18.2 | 18.0 | 17.9 | 17.7 | 17.5 | 17.3 | 17.4 | 17.7 | 17.3 | 17.0 | 16.7 | +1.7 | -2.3 | -1.7 | -1.8 | -1.0** |
| Nonmetropolitan------- | 20.4 | 19.8 | 19.2 | 18.8 | 18.0 | 18.1 | 17.7 | 17.7 | 17.9 | 17.7 | 17.6 | 17.3 | +1.1 | -1.1 | -0.6 | -1.7 | -2.1** |
| Under 1 week------ | 17.0 | 16.7 | 16.3 | 16.3 | 15.8 | 16.0 | 15.7 | 15.7 | 15.9 | 15.7 | 15.6 | 15.4 | +1.3 | -1.3 | -0.6 | -1.3 | -1.1** |
| Under 3 days---- | 14.7 | 14.3 | 14.1 | 14.0 | 13.7 | 13.9 | 13.7 | 13.7 | 13.9 | 13.9 | 13.9 | 13.7 | +1.5 | 0 | 0 | -1.4 | -0.9** |
| Under 1 day--- | 9.7 | 9.3 | 9.2 | 9.1 | 9.0 | 9.3 | 9.3 | 9.3 | 9.5 | 9.5 | 9.6 | 9.5 | +2.2 | 0 | +1.1 | -1.1 | -0.3 |
| 1 day--------- | 3.0 | 3.0 | 2.9 | 2.9 | 2.8 | 2.8 | 2.7 | 2.6 | 2.6 | 2.6 | 2.5 | 2.5 | 0 | 0 | -3.9 | 0 | -2.0** |
| 2 days-------- | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.8 | 1.7 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 0 | 0 | -5.6 | 0 | -2.3** |
| 3-6 days-------- | 2.3 | 2.4 | 2.2 | 2.3 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 1.8 | 1.7 | 1.6 | 0 | -10.0 | -5.6 | -5.9 | -2.6** |
| 7-27 days--------- | 2.3 | 2.3 | 2.1 | 2.1 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.7 | 1.7 | 1.6 | 0 | -10.5 | 0 | -5.9 | -3.5** |
| Postneonatal (1-11 months)-------- | 7.4 | 6.9 | 7.0 | 6.7 | 6.1 | 5.9 | 5.7 | 5.8 | 6.0 | 5.7 | 5.7 | 5.5 | +3.4 | -5.0 | 0 | -3.5 | -4.0** |
| Metropolitan---------- | 5.9 | 5.7 | 5.9 | 5.7 | 5.3 | 5.1 | 5.1 | 5.2 | 5.4 | 5.2 | 5.2 | 5.1 | +3.8 | -3.7 | 0 | -1.9 | -2.4** |
| Nonmetropolitan------- | 9.3 | 8.6 | 8.5 | 8.2 | 7.1 | 6.9 | 6.6 | 6.7 | 6.9 | 6.5 | 6.5 | 6.2 | +3.0 | -5.8 | 0 | -4.6 | -5.4** |
| 1-5 months-------- | 5.2 | 4.7 | 4.8 | 4.7 | 4.2 | 4.2 | 4.2 | 4.2 | 4.4 | 4.2 | 4.2 | 4.1 | +4.8 | -4.6 | 0 | -2.4 | -3.1** |
| 6-11 months------- | 2.3 | 2.1 | 2.2 | 1.9 | 1.8 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 | 0 | -6.3 | 0 | -6.7 | -6.0** |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 14b. INFANT, NEONATAL, AND POSTNEONATAL MORTALITY RATES, IN METROPOLITAN AND NONMETROPOLITAN COUNTIES, AND FOR SPECIFIED AGES; WITH ANNUAL PERCENT CHANGE, BY COLOR: UNITED STATES, 1950-1961 1/

(By place of residence)

NONWHITE INFANTS

| AGE AND COUNTY GROUP | RATE PER 1,000 LIVE BIRTHS | | | | | | | | | | | | PERCENT CHANGE IN RATE | | | | ANNUAL PERCENT CHANGE IN RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1958 from 1957 | 1959 from 1958 | 1960 from 1959 | 1961 from 1960 | 1950-1957 |
| Infant (under 1 year)--- | 44.5 | 44.8 | 47.0 | 44.7 | 42.9 | 42.8 | 42.1 | 43.7 | 45.7 | 44.0 | 43.2 | 40.7 | +4.6 | -3.7 | -1.8 | -5.8 | -0.9 |
| Metropolitan---------- | 40.0 | 39.9 | 41.2 | 39.8 | 39.4 | 39.5 | 39.1 | 41.3 | 42.4 | 40.7 | 39.5 | 37.7 | +2.7 | -4.0 | -3.0 | -4.6 | -0.0 |
| Nonmetropolitan------- | 49.0 | 50.1 | 53.6 | 50.5 | 47.2 | 47.2 | 46.2 | 47.3 | 50.7 | 49.3 | 50.2 | 46.6 | +7.2 | -2.8 | +1.8 | -7.2 | -1.3 |
| Neonatal (under 28 days)---------- | 27.5 | 27.3 | 28.0 | 27.4 | 27.0 | 27.2 | 27.0 | 27.8 | 29.0 | 27.7 | 26.9 | 26.2 | +4.3 | -4.5 | -2.9 | -2.6 | -0.1 |
| Metropolitan---------- | 28.1 | 27.5 | 27.7 | 27.3 | 27.5 | 28.0 | 27.9 | 29.1 | 30.0 | 28.2 | 27.1 | 26.5 | +3.1 | -6.0 | -3.9 | -2.2 | +0.4 |
| Nonmetropolitan------- | 26.9 | 27.2 | 28.4 | 27.5 | 26.3 | 26.1 | 25.8 | 25.9 | 27.5 | 26.8 | 26.5 | 25.7 | +6.2 | -2.6 | -1.1 | -3.0 | -1.0* |
| Under 1 week------ | 22.8 | 22.7 | 23.0 | 22.6 | 22.6 | 23.1 | 22.6 | 23.1 | 24.3 | 23.4 | 22.9 | 22.4 | +5.2 | -3.7 | -2.1 | -2.2 | +0.1 |
| Under 3 days---- | 19.0 | 18.8 | 19.1 | 18.8 | 19.2 | 19.6 | 19.5 | 19.7 | 20.4 | 20.3 | 20.1 | 19.7 | +3.6 | -0.5 | -1.0 | -2.0 | +0.6** |
| Under 1 day--- | 13.0 | 12.7 | 12.8 | 12.9 | 13.3 | 13.9 | 13.7 | 13.9 | 14.3 | 14.5 | 14.4 | 14.2 | +2.9 | +1.4 | -0.7 | -1.4 | +1.4** |
| 1 day--------- | 3.7 | 3.8 | 3.8 | 3.6 | 3.5 | 3.5 | 3.5 | 3.6 | 3.7 | 3.6 | 3.7 | 3.4 | +2.8 | -2.7 | +2.8 | -8.1 | -1.1* |
| 2 days-------- | 2.3 | 2.3 | 2.5 | 2.3 | 2.4 | 2.2 | 2.3 | 2.2 | 2.4 | 2.2 | 2.0 | 2.1 | +9.1 | -8.3 | -9.1 | +5.0 | -0.8 |
| 3-6 days-------- | 3.8 | 3.9 | 3.9 | 3.8 | 3.4 | 3.5 | 3.1 | 3.4 | 3.9 | 3.1 | 2.8 | 2.8 | +14.7 | -20.5 | -9.7 | 0 | -2.9* |
| 7-27 days--------- | 4.8 | 4.7 | 5.0 | 4.7 | 4.4 | 4.2 | 4.3 | 4.6 | 4.7 | 4.3 | 4.0 | 2.8 | +2.2 | -8.5 | -7.0 | -5.0 | -1.6 |
| Postneonatal (1-11 months)-------- | 16.9 | 17.5 | 19.0 | 17.3 | 15.9 | 15.6 | 15.1 | 15.9 | 16.7 | 16.4 | 16.4 | 14.5 | +5.0 | -1.8 | 0 | -11.6 | -2.3* |
| Metropolitan---------- | 11.9 | 12.4 | 13.5 | 12.5 | 11.9 | 11.5 | 11.2 | 12.2 | 12.5 | 12.5 | 12.4 | 11.2 | +2.5 | 0 | -0.8 | -9.7 | -1.0 |
| Nonmetropolitan------- | 22.1 | 22.9 | 25.2 | 23.0 | 20.9 | 21.1 | 20.4 | 21.4 | 23.3 | 22.5 | 23.7 | 20.9 | +8.9 | -3.4 | +5.3 | -11.8 | -1.7 |
| 1-5 months-------- | 11.8 | 12.1 | 13.3 | 12.4 | 11.4 | 11.3 | 10.9 | 11.6 | 12.4 | 12.3 | 12.1 | 11.0 | +6.9 | -0.8 | -1.6 | -9.1 | -1.5 |
| 6-11 months------- | 5.3 | 5.4 | 5.7 | 5.0 | 4.5 | 4.3 | 4.1 | 4.4 | 4.3 | 4.1 | 4.2 | 3.5 | -4.6 | -4.7 | +2.4 | -16.7 | -4.4** |

1/Fifty States and District of Columbia, including Alaska from 1959 and Hawaii from 1960.

Table 15. INFANT MORTALITY RATES, BY COLOR: UNITED STATES AND SELECTED CITIES, 1950, 1955, 1960 AND 1961

(By place of residence)

| CITIES RANKED BY NUMBER OF LIVE BIRTHS, 1961 | NUMBER OF LIVE BIRTHS | | RATE PER 1,000 LIVE BIRTHS | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1961 | 1960 | 1961 | 1960 | 1955 | 1950 | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| New York City--------- | 160,396 | 157,706 | 25.7 | 26.3 | 26.4 | 24.9 | -2.3 | -0.4 | +6.0 | +5.6 |
| White----- | 123,258 | 122,640 | 21.4 | 21.6 | 23.2 | 22.4 | -0.9 | -6.9 | +3.6 | -3.6 |
| Nonwhite-- | 37,138 | 35,066 | 40.0 | 42.6 | 40.8 | 39.1 | -6.1 | +4.4 | +4.3 | +9.0 |
| Chicago---------- | 87,958 | 88,686 | 27.7 | 29.0 | 27.3 | 25.4 | -4.5 | +6.2 | +7.5 | +14.2 |
| White----- | 56,420 | 57,768 | 22.9 | 23.4 | 21.6 | 23.0 | -2.1 | +8.3 | -6.1 | +1.7 |
| Nonwhite-- | 31,538 | 30,918 | 36.4 | 39.5 | 41.7 | 34.8 | -7.9 | -5.3 | +19.8 | +13.5 |
| Los Angeles---------- | 55,734 | 55,308 | 23.7 | 24.5 | 23.2 | 24.8 | -3.3 | +5.6 | -6.5 | -1.2 |
| White----- | 41,412 | 41,502 | 21.9 | 22.3 | 21.3 | 23.1 | -1.8 | +4.7 | -7.8 | -3.5 |
| Nonwhite-- | 14,322 | 13,806 | 28.8 | 31.1 | 30.8 | 34.9 | -7.4 | +1.0 | -11.8 | -10.9 |
| Philadelphia---------- | 44,988 | 44,606 | 29.8 | 31.6 | 32.2 | 31.1 | -5.7 | -1.9 | +3.5 | +1.6 |
| White----- | 28,844 | 28,620 | 23.5 | 26.2 | 26.7 | 25.8 | -10.3 | -1.9 | +3.5 | +1.6 |
| Nonwhite-- | 16,144 | 15,986 | 41.1 | 41.3 | 44.6 | 46.9 | -0.5 | -7.4 | -4.9 | -12.0 |
| Detroit---------- | 34,626 | 36,060 | 27.8 | 30.9 | 26.1 | 26.9 | -10.0 | +18.4 | -3.0 | +14.9 |
| White----- | 21,296 | 22,496 | 23.9 | 25.6 | 21.8 | 24.9 | -6.7 | +17.4 | -12.5 | +2.8 |
| Nonwhite-- | 13,330 | 13,564 | 34.1 | 39.7 | 36.0 | 34.6 | -14.1 | +10.3 | +4.0 | +14.7 |
| Houston---------- | 26,038 | 19,872 | 26.3 | 28.5 | 26.9 | 28.7 | -7.7 | +5.9 | -6.3 | -0.7 |
| White----- | 18,352 | 13,324 | 22.3 | 23.8 | 22.8 | 25.6 | -6.3 | +4.4 | -10.9 | -7.0 |
| Nonwhite-- | 7,686 | 6,548 | 35.8 | 38.2 | 37.9 | 38.5 | -6.3 | +0.8 | -1.6 | -0.8 |
| Baltimore---------- | 22,852 | 23,372 | 32.5 | 32.6 | 30.9 | 28.0 | -0.3 | +5.5 | +10.4 | +16.4 |
| White----- | 11,694 | 12,096 | 25.6 | 25.0 | 24.0 | 22.6 | +2.4 | +4.2 | +6.2 | +10.6 |
| Nonwhite-- | 11,158 | 11,276 | 39.8 | 40.9 | 42.0 | 38.8 | -2.7 | -2.6 | +8.2 | +5.4 |
| Cleveland---------- | 21,624 | 22,034 | 27.9 | 31.0 | 28.8 | 25.6 | -10.0 | +7.6 | +12.5 | +21.1 |
| White----- | 13,880 | 14,354 | 23.3 | 26.2 | 22.3 | 23.1 | -11.1 | +17.5 | -3.5 | +13.4 |
| Nonwhite-- | 7,744 | 7,680 | 36.2 | 39.8 | 44.5 | 34.9 | -9.1 | -10.6 | +27.5 | +14.0 |
| District of Columbia-- | 20,372 | 19,872 | 35.6 | 36.4 | 32.2 | 30.4 | -2.2 | +13.0 | +5.9 | +19.7 |
| White----- | 6,140 | 6,196 | 27.2 | 29.4 | 23.7 | 30.5 | -7.5 | +24.1 | -22.3 | -3.6 |
| Nonwhite-- | 14,232 | 13,676 | 39.2 | 39.6 | 39.2 | 30.3 | -1.0 | +1.0 | +29.4 | +30.7 |
| St. Louis---------- | 18,584 | 19,432 | 31.4 | 32.6 | 27.7 | 25.8 | -3.7 | +17.7 | +7.4 | +26.4 |
| White----- | 11,324 | 11,894 | 24.5 | 24.5 | 23.1 | 21.2 | 0 | +6.1 | +9.0 | +15.6 |
| Nonwhite-- | 7,266 | 7,538 | 42.1 | 45.5 | 38.0 | 40.9 | -7.5 | +19.7 | -7.1 | +11.2 |
| United States 1/------ | 4,268,326 | 4,257,850 | 25.3 | 26.0 | 26.4 | 29.2 | -2.7 | -1.5 | -9.6 | -11.0 |
| White----- | 3,600,864 | 3,600,744 | 22.4 | 22.9 | 23.6 | 26.8 | -2.2 | -3.0 | -12.0 | -14.6 |
| Nonwhite-- | 667,462 | 657,106 | 40.7 | 43.2 | 42.8 | 44.5 | -5.8 | +0.9 | -3.8 | -2.9 |

1/Exclusive of Puerto Rico and Virgin Islands, each year specified, and of Alaska and Hawaii in 1950 and 1955.

Table 16. NEONATAL MORTALITY RATES BY COLOR: UNITED STATES AND SELECTED CITIES, 1950, 1955, 1960 AND 1961

(By place of residence)

| CITIES RANKED BY NUMBER OF LIVE BIRTHS, 1961 | NUMBER OF LIVE BIRTHS | | RATE PER 1,000 LIVE BIRTHS | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1961 | 1960 | 1961 | 1960 | 1955 | 1950 | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| New York City--------- | 160,396 | 157,706 | 19.4 | 19.4 | 20.0 | 19.2 | 0 | -3.0 | +4.2 | +1.0 |
| White----- | 123,258 | 122,640 | 16.3 | 16.0 | 17.5 | 17.2 | +1.9 | -8.6 | +1.7 | -7.0 |
| Nonwhite-- | 37,138 | 35,066 | 29.8 | 31.3 | 31.3 | 30.4 | -4.8 | 0 | +3.0 | +3.0 |
| Chicago---------- | 87,958 | 88,686 | 19.5 | 20.1 | 19.2 | 18.9 | -3.0 | +4.7 | +1.6 | +6.3 |
| White----- | 56,420 | 57,768 | 16.4 | 17.3 | 15.9 | 17.4 | -5.2 | +8.8 | -8.6 | -0.6 |
| Nonwhite-- | 31,538 | 30,918 | 24.9 | 25.5 | 27.4 | 25.0 | -2.4 | -6.9 | +9.6 | +2.0 |
| Los Angeles---------- | 55,734 | 55,308 | 18.1 | 18.4 | 17.8 | 20.1 | -1.6 | +3.4 | -11.5 | -8.5 |
| White----- | 41,412 | 41,502 | 17.1 | 16.7 | 16.7 | 18.9 | +2.4 | 0 | -11.7 | -11.7 |
| Nonwhite-- | 14,322 | 13,806 | 21.2 | 23.7 | 22.7 | 27.6 | -10.6 | +4.4 | -17.8 | -14.1 |
| Philadelphia--------- | 44,988 | 44,606 | 23.0 | 23.8 | 25.9 | 23.5 | -3.4 | -8.1 | +10.2 | +1.3 |
| White----- | 28,844 | 28,620 | 18.5 | 20.6 | 21.6 | 20.1 | -10.2 | -4.6 | +7.5 | +2.5 |
| Nonwhite-- | 16,144 | 15,986 | 31.0 | 29.5 | 35.4 | 33.4 | +5.1 | -16.7 | +6.0 | -11.7 |
| Detroit---------- | 34,626 | 36,060 | 21.6 | 23.6 | 20.8 | 20.2 | -8.5 | +13.5 | +3.0 | +16.8 |
| White----- | 21,296 | 22,496 | 18.6 | 19.9 | 17.9 | 18.8 | -6.5 | +11.2 | -4.8 | +5.9 |
| Nonwhite-- | 13,330 | 13,564 | 26.3 | 29.9 | 27.3 | 25.8 | -12.1 | +9.5 | +5.8 | +15.9 |
| Houston---------- | 26,038 | 19,872 | 18.2 | 20.1 | 20.5 | 23.6 | -9.5 | -2.0 | -13.1 | -14.8 |
| White----- | 18,352 | 13,324 | 17.2 | 18.8 | 17.8 | 21.2 | -8.5 | +5.6 | -16.0 | -11.3 |
| Nonwhite-- | 7,686 | 6,548 | 20.6 | 22.9 | 27.9 | 31.1 | -10.1 | -17.9 | -10.3 | -26.4 |
| Baltimore---------- | 22,852 | 23,372 | 24.7 | 23.9 | 22.4 | 20.3 | +3.3 | +6.7 | +10.3 | +17.7 |
| White----- | 11,694 | 12,096 | 19.5 | 19.1 | 17.4 | 17.5 | +2.1 | +9.8 | -0.6 | +9.1 |
| Nonwhite-- | 11,158 | 11,276 | 30.1 | 29.0 | 30.7 | 26.0 | +3.8 | -5.5 | +18.1 | +11.5 |
| Cleveland---------- | 21,624 | 22,034 | 22.4 | 24.4 | 22.2 | 19.5 | -8.2 | +9.9 | +13.8 | +25.1 |
| White----- | 13,880 | 14,354 | 18.2 | 20.8 | 17.0 | 17.9 | -12.5 | +22.4 | -5.0 | +16.2 |
| Nonwhite-- | 7,744 | 7,680 | 30.1 | 31.1 | 34.8 | 25.6 | -3.2 | -10.6 | +35.9 | +21.5 |
| District of Columbia-- | 20,372 | 19,872 | 27.2 | 27.4 | 26.0 | 24.5 | -0.7 | +5.4 | +6.1 | +11.8 |
| White----- | 6,140 | 6,196 | 22.5 | 22.3 | 20.3 | 26.0 | +0.9 | +9.9 | -21.9 | -14.2 |
| Nonwhite-- | 14,232 | 13,676 | 29.3 | 29.8 | 30.8 | 22.6 | -1.7 | -3.3 | +36.3 | +31.9 |
| St. Louis---------- | 18,584 | 19,432 | 23.5 | 24.0 | 20.6 | 19.2 | -2.1 | +16.5 | +7.3 | +25.0 |
| White----- | 11,324 | 11,894 | 18.8 | 18.5 | 17.6 | 16.2 | +1.6 | +5.1 | +8.6 | +14.2 |
| Nonwhite-- | 7,260 | 7,538 | 30.9 | 32.8 | 27.2 | 29.3 | -5.8 | +20.6 | -7.2 | +11.9 |
| United States[1/]------- | 4,268,326 | 4,257,850 | 18.4 | 18.7 | 19.1 | 20.5 | -1.6 | -2.1 | -6.8 | -8.8 |
| White----- | 3,600,864 | 3,600,744 | 16.9 | 17.2 | 17.7 | 19.4 | -1.8 | -2.8 | -8.8 | -11.4 |
| Nonwhite-- | 667,462 | 657,106 | 26.2 | 26.9 | 27.2 | 27.5 | -2.6 | -1.1 | -1.1 | -2.2 |

1/ Exclusive of Puerto Rico and Virgin Islands, each year specified, and of Alaska and Hawaii in 1950 and 1955.

Table 17. POSTNEONATAL MORTALITY RATES BY COLOR: UNITED STATES AND SELECTED CITIES, 1950, 1955, 1960 and 1961

(By place of residence)

| CITIES RANKED BY NUMBER OF LIVE BIRTHS, 1961 | NUMBER OF LIVE BIRTHS | | RATE PER 1,000 LIVE BIRTHS | | | | PERCENT CHANGE IN RATE | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1961 | 1960 | 1961 | 1960 | 1955[1] | 1950[1] | 1961 from 1960 | 1960 from 1955 | 1955 from 1950 | 1960 from 1950 |
| New York City | 160,396 | 157,706 | 6.2 | 6.9 | 6.4 | 5.7 | -10.2 | +7.8 | +12.3 | +21.1 |
| White | 123,258 | 122,640 | 5.0 | 5.6 | 5.7 | 5.2 | -10.7 | -1.8 | +9.6 | +7.7 |
| Nonwhite | 37,138 | 35,066 | 10.3 | 11.3 | 9.5 | 8.7 | -8.9 | +18.9 | +9.2 | +29.9 |
| Chicago | 87,958 | 88,686 | 8.3 | 8.9 | 8.1 | 7.1 | -6.8 | +9.9 | +14.1 | +25.4 |
| White | 56,420 | 57,768 | 6.5 | 6.1 | 5.7 | 6.1 | +6.6 | +7.0 | -6.6 | 0 |
| Nonwhite | 31,538 | 30,918 | 11.5 | 14.0 | 14.3 | 9.9 | -17.9 | -2.1 | +44.4 | +41.4 |
| Los Angeles | 55,734 | 55,308 | 5.6 | 6.1 | 5.4 | 4.7 | -8.2 | +13.0 | +14.9 | +29.8 |
| White | 41,412 | 41,502 | 4.9 | 5.6 | 4.6 | 4.2 | -12.5 | +21.7 | +9.5 | +33.3 |
| Nonwhite | 14,322 | 13,806 | 7.6 | 7.4 | 8.1 | 7.3 | +2.7 | -8.7 | +11.0 | +1.4 |
| Philadelphia | 44,988 | 44,606 | 6.8 | 7.8 | 6.3 | 7.6 | -12.8 | +23.8 | -17.1 | +2.6 |
| White | 28,844 | 28,620 | 5.0 | 5.6 | 5.1 | 5.7 | -10.7 | +9.8 | -10.5 | -1.8 |
| Nonwhite | 16,144 | 15,986 | 10.0 | 11.8 | 9.2 | 13.5 | -15.3 | +28.3 | -31.9 | -12.6 |
| Detroit | 34,626 | 36,060 | 6.2 | 7.3 | 5.3 | 6.7 | -15.1 | +37.7 | -20.9 | +9.0 |
| White | 21,296 | 22,496 | 5.2 | 5.7 | 3.9 | 6.1 | -8.8 | +46.2 | -36.1 | -6.6 |
| Nonwhite | 13,330 | 13,564 | 7.8 | 9.8 | 8.7 | 14.9 | -20.4 | +12.6 | -41.6 | -34.2 |
| Houston | 26,038 | 19,872 | 8.1 | 8.4 | 6.4 | 5.1 | -3.6 | +31.3 | +25.5 | +64.7 |
| White | 18,352 | 13,324 | 5.1 | 5.0 | 5.0 | 4.4 | +2.0 | 0 | +13.6 | +13.6 |
| Nonwhite | 7,686 | 6,548 | 15.2 | 15.3 | 10.0 | 7.4 | -0.7 | +53.0 | +35.1 | +106.8 |
| Baltimore | 22,852 | 23,372 | 7.8 | 8.7 | 8.5 | 7.7 | -10.4 | +2.4 | +10.4 | +13.0 |
| White | 11,694 | 12,096 | 6.1 | 5.9 | 6.6 | 5.1 | +3.4 | -10.6 | +29.4 | +15.7 |
| Nonwhite | 11,158 | 11,276 | 9.7 | 11.9 | 11.3 | 12.8 | -18.5 | +5.3 | -11.7 | -7.0 |
| Cleveland | 21,624 | 22,034 | 5.5 | 6.6 | 6.6 | 6.1 | -16.8 | 0 | +8.2 | +8.2 |
| White | 13,880 | 14,354 | 5.2 | 5.4 | 5.3 | 5.2 | -3.7 | +1.9 | +1.9 | +3.8 |
| Nonwhite | 7,744 | 7,680 | 6.1 | 8.7 | 9.7 | 9.3 | -29.9 | -10.3 | +4.3 | -6.5 |
| District of Columbia | 20,372 | 19,872 | 8.3 | 9.0 | 6.2 | 5.9 | -7.8 | +45.2 | +5.1 | +52.5 |
| White | 6,140 | 6,196 | 4.7 | 7.1 | 3.4 | 4.5 | -33.8 | +108.8 | -24.5 | +57.8 |
| Nonwhite | 14,232 | 13,676 | 9.9 | 9.8 | 8.4 | 7.7 | +1.0 | +16.7 | +9.1 | +27.3 |
| St. Louis | 18,584 | 19,432 | 7.9 | 8.6 | 7.1 | 6.6 | -8.1 | +21.1 | +7.6 | +30.3 |
| White | 11,324 | 11,894 | 5.7 | 6.0 | 5.5 | 5.0 | -5.0 | +9.1 | +10.0 | +20.0 |
| Nonwhite | 7,260 | 7,538 | 11.3 | 12.7 | 10.8 | 11.6 | -11.0 | +17.6 | -6.9 | +9.5 |
| United States[2] | 4,268,326 | 4,257,850 | 6.9 | 7.3 | 7.3 | 8.7 | -5.5 | 0 | -16.1 | -16.1 |
| White | 3,600,864 | 3,600,744 | 5.5 | 5.7 | 5.9 | 7.4 | -3.5 | -3.4 | -20.3 | -23.0 |
| Nonwhite | 667,462 | 657,106 | 14.5 | 16.3 | 15.6 | 17.0 | -11.1 | +4.5 | -8.2 | -4.1 |

1/Postneonatal rates for 1950, 1955 by subtraction (neonatal from infant).
2/Exclusive of Puerto Rico and Virgin Islands, each year specified, and of Alaska and Hawaii in 1950 and 1955.

TABLE 18.--INFANT MORTALITY RATE AND PERCENT CHANGE BY SPECIFIED AGE GROUPS: UNITED STATES AND SELECTED COUNTRIES, 1959-61 AND 1949-51

(Rates are number of deaths in the specified age group per 1,000 live births)

| COUNTRY (Listed according to average infant mortality rate, 1959-61) | 1959-61 | | | 1949-51 | | | PERCENT REDUCTION 1959-61 FROM 1949-51 5/ | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total under 1 year 1/ | Neonatal under 28 days 2/ | Post-neonatal 1-11 months 3/ | Total under 1 year 4/ | Neonatal under 28 days 4/ | Post-neonatal 1-11 months 4/ | Total under 1 year | Neonatal under 28 days | Post-neonatal 1-11 months |
| Sweden* | 16.3 | 13.2 | 3.2 | 22.0 | 15.8 | 6.2 | -25.9 | -16.5 | -48.4 |
| Netherlands 6/ | 17.7 | 13.2 | 4.5 | 27.2 | 18.2 | 8.9 | -34.9 | -27.5 | -49.4 |
| Norway 7/ | 18.5 | 12.1 | 6.3 | 27.2 | 14.7 | 12.5 | -32.0 | -17.7 | -49.6 |
| Australia (R) 8/ | 20.4 | 14.6 | 5.8 | 25.0 | 17.6 | 7.4 | -18.4 | -17.1 | -21.6 |
| Switzerland 9/ | 21.4 | 9/ 16.3 | 9/ 5.4 | 31.9 | 22.0 | 9.9 | -32.9 | -25.9 | -45.5 |
| Finland 10/ | 21.8 | 15.1 | 6.7 | 42.6 | 21.8 | 20.9 | -48.8 | -30.7 | -67.9 |
| Denmark 11/ | 21.9 | 16.2 | 5.7 | 31.4 | 18.5 | 12.8 | -30.3 | -12.4 | -55.5 |
| United Kingdom 12/* | 22.6 | 16.0 | 6.5 | 32.2 | 19.6 | 12.6 | -29.8 | -18.4 | -48.4 |
| New Zealand (including Maori) (R) 13/ | 23.1 | 14.6 | 8.4 | 28.4 | 13/ | 13/ | -18.7 | 13/ | 13/ |
| United States 14/ | 25.9 | 18.7 | 7.3 | 29.6 | 20.7 | 9.0 | -12.5 | -9.7 | -18.9 |
| Canada 15/ | 28.0 | 18.2 | 9.7 | 41.1 | 15/ 23.7 | 15/ 17.4 | -31.9 | -23.2 | -44.3 |
| Ireland (R) 16/ | 30.6 | 20.7 | 9.9 | 48.5 | 24.3 | 24.2 | -36.9 | -14.8 | -59.1 |
| Japan 17/* | 31.0 | 17.4 | 13.6 | 60.2 | 27.9 | 32.3 | -48.5 | -37.6 | -57.9 |
| Luxembourg 18/ | 31.6 | 19.3 | 12.4 | 44.3 | 26.1 | 18.2 | -28.7 | -26.1 | -31.9 |
| Federal Republic of Germany 19/ | 33.2 | 23.3 | 9.9 | 55.8 | 33.9 | 22.0 | -40.5 | -31.3 | -55.0 |

(R) Data tabulated by year of registration rather than occurrence.

* Provisional data: for births in 1961, Japan and Sweden; for infant deaths, United Kingdom.

1/ Differences in rate are statistically significant, except those between Netherlands and Norway; among Switzerland, Finland and Denmark; those among Ireland, Japan, and Luxembourg; between United Kingdom and New Zealand; and between Federal Republic of Germany and Luxembourg.

2/ Differences in rate are statistically significant, except those among New Zealand, Australia, Finland; among United Kingdom, Denmark, and Switzerland; and between Luxembourg and each of the following: Japan, Canada, United States, and Ireland.

3/ Differences in rate are statistically significant, except those among Norway, United Kingdom, and Finland; among Canada, Ireland and Federal Republic of Germany; between Denmark and Switzerland on the one hand, and Denmark and Australia on the other; and between Luxembourg and Japan.

4/ Differences in infant rates are statistically significant, except those among Denmark, Switzerland and United Kingdom; between Luxembourg and Canada; and Luxembourg and Finland. In neonatal rates differences are significant except between Sweden and New Zealand; between Netherlands and Denmark; between Finland and Switzerland; and among Canada, Ireland and Luxembourg. In postneonatal rates differences are significant except between Sweden and New Zealand; between Netherlands and the United States; Between Canada and Luxembourg; and among Norway, United Kingdom, and Denmark.

5/ Reductions in rate are statistically significant.

6/ Including residents outside country if listed in a Netherlands population register. Prior to 1959, excluding Amboynese living in camps. Excluding alien armed forces stationed in area. Data for 1950, 1951, and 1959-61 are adjusted to include total live births and deaths therein prior to registration (21). For 1949, an adjustment was estimated from 1950-61 experience, and 1949 reporting requirement.

7/ Including residents temporarily outside country.

8/ Excluding full blooded Aborigines, estimated at 39,319 in June 1954.

9/ Data on neonatal deaths (under 28 days) were not available for 1961. Rates are for 1959-60.

10/ Prior to 1951, data are for Finnish nationals in Finland only; beginning 1951, includes also data for nationals temporarily outside country.

11/ Excluding Greenland and Faeroe Islands; including armed forces stationed outside the country.

12/ Data are tabulated by year of occurrence for England and Wales, and by year of registration for Northern Ireland and Scotland.

13/ Data for the years 1949-51 for neonatal and postneonatal deaths were not available for the Maori.

14/ Data refer only to births and deaths occurring within the United States. Alaska is included beginning in 1959, and Hawaii, beginning 1960.

15/ Including Canadian residents temporarily in the United States, but excluding United States residents temporarily in Canada. Newfoundland, Yukon and Northwest Territories are included in all years, except in 1949 in the case of neonatal and postneonatal death rate.

16/ Data are for births and deaths registered within 1 year of occurrence.

17/ Data are for Japanese nationals in Japan only. Prior to May 1952, excluding Tokara Archipelago; and prior to 1954, Amani Islands.

18/ Data are for births and deaths among residents.

19/ Including residents of the Federal Republic of Germany temporarily in West Berlin, and excluding alien armed forces and nonresident civilians temporarily in the area. Classification of deaths by age based on difference between date of birth and date of death rather than on completed days of life.

SOURCES OF DATA: Demographic Yearbook, 1962; and for the following years: 1961, 1957, 1956, 1954, 1953 and 1952. Statistical Office, United Nations, New York, New York; other official reports for some countries.

United States Department of Health, Education, and Welfare, National Center for Health Statistics, Division of Vital Statistics, for data on the United States.

Table 19.--INFANT AND PERINATAL MORTALITY RATES IN SPECIFIED AGE PERIODS, AND PERCENT CHANGE IN RATE: UNITED STATES AND SELECTED COUNTRIES, 1959-61 AND 1954-56

(Fetal deaths are those of at least 28 weeks gestation. Fetal deaths of unknown gestational age are included. For the United States, fetal deaths included are those of 28 weeks or over and a proportionate number of those with duration not stated.)

| Country (Listed according to average infant mortality rate, 1959-61) | 1959-61 | | | | | | Change in rate 1959-61 from 1954-56 7/ 8/ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Infancy | | | Perinatal Period | | Perinatal and post-neonatal periods | Infancy | | | Perinatal Period | | Perinatal and post-neonatal periods |
| | Total under 1 year 1/ | Neonatal under 28 days 2/ | Post-neonatal 1-11 months 3/ | Total fetal and neonatal 4/ | Fetal 5/ | 6/ | Total under 1 year | Neonatal under 28 days | Post-neonatal 1-11 months | Total fetal and neonatal | Fetal | |
| | Rate per 1,000 live births | | | Rate per 1,000 total births (live and still) | | | PERCENT | | | | | |
| Sweden*---------- | 16.3 | 13.2 | 3.2 | 26.7 | 13.7 | 29.8 | -8.4 | -0.8 | -28.9 | -10.7 | -18.5 | -13.1 |
| Netherlands 9/ ---------- | 17.7 | 13.2 | 4.5 | 28.1 | 15.2 | 32.6 | -17.7 | -13.7 | -27.4 | -12.5 | -11.1 | -14.7 |
| Norway 10/---------- | 18.5 | 12.1 | 6.3 | 25.3 | 13.4 | 31.6 | -12.3 | -0.8 | -28.4 | -6.0 | -9.5 | -11.2 |
| Australia (R) 11/---------- | 20.4 | 14.6 | 5.8 | 29.1 | 14.0 | 35.3 | -7.7 | -7.6 | -7.9 | -5.8 | -9.1 | -4.9 |
| Switzerland 12/---------- | 21.4 | 16.3 | 5.4 | 27.7 | 11.6 | 33.0 | -19.3 | -15.1 | -26.0 | -16.8 | -20.0 | -18.5 |
| Finland 13/---------- | 21.8 | 15.1 | 6.7 | 28.3 | 13.4 | 34.9 | -24.1 | -16.6 | -36.8 | -15.5 | -14.6 | -20.5 |
| Denmark 14/---------- | 21.9 | 16.2 | 5.7 | 29.2 | 13.2 | 34.8 | -14.8 | -9.5 | -26.9 | -18.2 | -27.5 | -19.8 |
| United Kingdom 15/*---------- | 22.6 | 16.0 | 6.5 | 35.6 | 20.0 | 42.0 | -11.4 | -9.6 | -16.7 | -9.0 | -11.1 | -11.6 |
| New Zealand (including Maori) (R)----- | 23.1 | 14.6 | 8.4 | 28.6 | 14.2 | 36.9 | -3.4 | +0.7 | -10.6 | -8.0 | -16.0 | -8.7 |
| United States 16/---------- | 25.9 | 18.7 | 7.3 | 30.5 | 12.0 | 37.6 | -1.5 | -1.6 | 0 | -3.8 | -7.0 | -3.4 |
| Canada 17/---------- | 28.0 | 18.2 | 9.7 | 31.3 | 13.3 | 40.9 | -11.7 | -7.2 | -20.5 | -10.3 | -14.8 | -12.8 |
| Ireland (R) 18/---------- | 30.6 | 20.7 | 9.9 | --- | --- | --- | -16.6 | -8.8 | -29.3 | ---- | --- | --- |
| Japan 19/*---------- | 31.0 | 17.4 | 13.6 | 46.9 | 30.0 | 60.1 | -25.7 | -25.0 | -26.9 | -11.4 | -1.3 | -15.1 |
| Luxembourg 20/---------- | 31.6 | 19.3 | 12.4 | 35.5 | 16.5 | 47.7 | -22.4 | -19.3 | -26.2 | -11.3 | 0 | -15.6 |
| Federal Republic of Germany 21/-------- | 33.2 | 23.3 | 9.9 | 38.0 | 15.0 | 47.7 | -19.0 | -15.6 | -26.1 | -18.3 | -22.7 | -20.1 |

(R) Data tabulated by year of registration rather than occurrence.

* Provisional data: for births in 1961, Japan and Sweden; for infant deaths, United Kingdom.

1/ Differences in rate are statistically significant, except those between Netherlands and Norway; among Switzerland, Finland and Denmark; between United Kingdom and New Zealand; among Ireland, Japan, and Luxembourg; and between the Federal Republic of Germany and Luxembourg.

2/ Differences in rate are statistically significant, except those among New Zealand, Australia, and Finland; among United Kingdom, Denmark and Switzerland; and between Luxembourg and Ireland.

3/ Differences in rate are statistically significant, except those among Norway, United Kingdom, and Finland; between Denmark and Switzerland on the one hand and Denmark and Australia on the other; among Canada, Ireland, and Federal Republic of Germany, and between Luxembourg and Japan.

4/ Differences in rate are statistically significant except those among New Zealand, Australia, Denmark; among Switzerland, Netherlands, Finland, and New Zealand; and between Luxembourg and United Kingdom.

5/ Differences in rate are statistically significant, except between Switzerland and United States; among Sweden, Denmark, Canada, Finland, and Norway on the one hand and Sweden, Australia and New Zealand on the other; and among Federal Republic of Germany, Netherlands, and Luxembourg.

6/ Differences in rate are statistically significant, except those between Netherlands and Switzerland; among Denmark, Finland, and Australia; and between New Zealand and the United States.

7/ See table 21 for corresponding rates in 1954-56, and significance of differences in the rates among countries.

8/ Change in rate is significant except for infant and neonatal mortality in New Zealand; and for neonatal mortality in Norway and Sweden.

9/ Including residents outside country if listed in a Netherlands population register. Prior to 1959, excluding Amboynese living in camps. Excluding alien armed forces stationed in area. Data are adjusted to include total live births and deaths therein prior to registration (21).

10/ Including residents temporarily outside country.

11/ Excluding full blooded aborigines, estimated at 39,319 in June 1954. Fetal death rate, perinatal rate, and perinatal plus postneonatal rate are for the year 1959 only, because fetal death data for 1960 and 1961 were unavailable.

12/ All rates specified, except the infant mortality rate, are for 1959-60 because data for 1961 were unavailable.

13/ Data include nationals temporarily outside the country as well as resident Finnish nationals. For 1959 and 1960 fetal deaths included are of pregnancies of 7 or more months; for 1961, those of pregnancies of 6 or more months. Fetal death data are of unknown completeness.

14/ Excluding Greenland and Faeroe Islands; including armed forces stationed outside the country.

15/ Data are tabulated by year of occurrence for England and Wales, and by year of registration for Northern Ireland and Scotland. Fetal, perinatal and perinatal plus postneonatal mortality rates, respectively, are exclusive of Northern Ireland for which fetal death data were unavailable.

16/ Data refer only to births and deaths occurring within the United States. Alaska is included beginning in 1959, and Hawaii, beginning 1960.

17/ Including Canadian residents temporarily in the United States, but excluding United States residents temporarily in Canada. Newfoundland, Yukon and Northwest Territories are included in all years.

18/ Data are for births and deaths registered within 1 year of occurrence. Fetal death data were unavailable.

19/ Data are for Japanese nationals in Japan only. Prior to May 1952, excluding Tokara Archipelago; and prior to 1954, Amani Islands. Fetal deaths included are those in pregnancies of 7 or more completed months.

20/ Data are for births and deaths among residents.

21/ Including residents of the Federal Republic of Germany temporarily in West Berlin, and excluding alien armed forces and nonresident civilians temporarily in the area. Classification of deaths by age based on difference between date of birth and date of death rather than on completed days of life. Criterion for registration of fetal death is fetal length of 35 or more centimeters. Sweden has the same criterion, while for Switzerland the length is 30 or more centimeters.

SOURCES OF DATA: Demographic Yearbook, 1962; and for the following years: 1961, 1957, 1956, 1954, 1953 and 1952. Statistical Office, United Nations, New York, New York; other official reports for some countries.

United States Department of Health, Education, and Welfare, National Center for Health Statistics, Division of Vital Statistics, for data on the United States.

Table 20.—INFANT AND PERINATAL MORTALITY RATES IN SPECIFIED AGE PERIODS: UNITED STATES AND SELECTED COUNTRIES, 1954-56

(Fetal deaths are those of at least 28 weeks gestation. Fetal deaths of unknown gestational age are included. For the United States, fetal deaths included are those of 28 weeks or over and a proportionate number of those with duration not stated.)

| COUNTRY (Listed according to average infant mortality rate, 1959-61) | Infancy | | | Perinatal period | | Perinatal and postneonatal periods 3/ |
|---|---|---|---|---|---|---|
| | Total under 1 year 1/ | Neonatal under 28 days | Postneonatal 1-11 months 2/ | Total fetal and neonatal | Fetal | |
| | Rate per 1,000 live births | | | Rate per 1,000 total births (live and still) | | |
| Sweden | 17.8 | 13.3 | 4.5 | 29.9 | 16.8 | 34.3 |
| Netherlands 4/ | 21.5 | 15.3 | 6.2 | 32.1 | 17.1 | 38.2 |
| Norway 5/ | 21.1 | 12.2 | 8.8 | 26.9 | 14.8 | 35.6 |
| Australia (R) 6/ | 22.1 | 15.8 | 6.3 | 30.9 | 15.4 | 37.1 |
| Switzerland | 26.5 | 19.2 | 7.3 | 33.3 | 14.5 | 40.5 |
| Finland 7/ | 28.7 | 18.1 | 10.6 | 33.5 | 15.7 | 43.9 |
| Denmark 8/ | 25.7 | 17.9 | 7.8 | 35.7 | 18.2 | 43.4 |
| United Kingdom 9/ | 25.5 | 17.7 | 7.8 | 39.1 | 22.5 | 47.5 |
| New Zealand (including Maori) (R) | 23.9 | 14.5 | 9.4 | 31.1 | 16.9 | 40.4 |
| United States 10/ | 26.3 | 19.0 | 7.3 | 31.7 | 12.9 | 38.9 |
| Canada 11/ | 31.7 | 19.6 | 12.2 | 34.9 | 15.6 | 46.9 |
| Ireland (R) 12/ | 36.7 | 22.7 | 14.0 | --- | --- | --- |
| Japan 13/ | 41.7 | 23.2 | 18.6 | 52.9 | 30.4 | 70.8 |
| Luxembourg 14/ | 40.7 | 23.9 | 16.8 | 40.0 | 16.5 | 56.5 |
| Federal Republic of Germany 15/ | 41.0 | 27.6 | 13.4 | 46.5 | 19.4 | 59.7 |

(R) Data tabulated by year of registration rather than occurrence.

See footnotes page 2.

1/ Differences in rate are statistically significant, except those between Netherlands and Norway; between Netherlands and Australia; among the United States, Denmark and Switzerland; and those between United Kingdom and Denmark, and between Luxembourg and Federal Republic of Germany on the one hand, and Luxembourg and Japan on the other.

2/ Differences in rate are statistically significant, except those between Netherlands and Australia, between Switzerland and Denmark, between Norway and New Zealand and between Luxembourg and Japan.

3/ Differences in rates are statistically significant, except those between New Zealand and Switzerland; between Denmark and Finland; and between Luxembourg and the Federal Republic of Germany.

4/ Including residents outside country if listed in a Netherlands population register. Prior to 1959, excluding Amboynese living in camps. Excluding alien armed forces stationed in area. Data are adjusted to include total live births and deaths therein prior to registration (21).

5/ Including residents temporarily outside country.

6/ Excluding full blooded aborigines, estimated at 39,319 in June 1954.

7/ Data include nationals temporarily outside the country as well as resident Finnish nationals. For 1954, fetal deaths of pregnancies of six or more months are included; for 1955-56, of seven or more months. Fetal death data are of unknown completeness.

8/ Excluding Greenland and Faeroe Islands; including armed forces stationed outside the country.

9/ Data are tabulated by year of occurrence for England and Wales, and by year of registration for Northern Ireland and Scotland. Fetal, perinatal and perinatal plus postneonatal mortality rates, respectively, are exclusive of Northern Ireland for which fetal death data were unavailable.

10/ Data refer only to births and deaths occurring within the United States, and are exclusive of Alaska and Hawaii.

11/ Including Canadian residents temporarily in the United States, but excluding United States, but excluding United States residents temporarily in Canada. Newfoundland, Yukon and Northwest Territories are included in all years.

12/ Data are for births and deaths registered within 1 year of occurrence. Fetal death data were unavailable.

13/ Data are for Japanese nationals in Japan only. Fetal deaths are those in pregnancies of 7 or more completed months.

14/ Data are for births and deaths among residents.

15/ Including residents of the Federal Republic of Germany temporarily in West Berlin, and excluding alien armed forces and nonresident civilians temporarily in the area. Classification of deaths by age based on difference between date of birth and date of death rather than on completed days of life. Criterion for registration of fetal death is 35 or more centimeters in fetal length. Sweden has the same criterion, while for Switzerland the length is 30 or more centimeters.

SOURCES OF DATA: Demographic Yearbook, 1962; and for the following years: 1961, 1957, 1956, 1954, 1953 and 1952. Statistical Office, United Nations, New York, New York; other official reports for some countries.

United States Department of Health, Education, and Welfare, National Center for Health Statistics, Division of Vital Statistics, for data on the United States.

TABLE 21.—INFANT MORTALITY RATE AND SELECTED SOCIO-ECONOMIC CHARACTERISTICS, 1960 CENSUS: UNITED STATES, 29 COUNTIES WITH 1,000 OR MORE LIVE BIRTHS AND INFANT MORTALITY RATE, 16.5 OR LESS (1960), AND RESPECTIVE STATES, LISTED ACCORDING TO STATE AVERAGE PER CAPITA INCOME (1960-62)

(Infant mortality rate is number of deaths under 1 year per 1,000 live births, by place of residence)

| STATE PER CAPITA INCOME GROUP (1960-62) STATE AND COUNTY | Infant mortality rate | Median family income 1959 (dollars) | PERSONS 25 YEARS OLD AND OVER | NONWHITE POPULATION | | CIVILIAN LABOR FORCE |
|---|---|---|---|---|---|---|
| | | | Median school year completed | Total | Percent of all races | Percent unemployed |
| High per capita income group | | | | | | |
| New York | 24.1 | 6,371 | 10.7 | 1,495,233 | 8.9 | 5.2 |
| Schenectady | 16.1 | 6,541 | 11.7 | 2,136 | 1.4 | 6.8 |
| Tioga | 15.5 | 5,626 | 11.2 | 1/ | --- | 4.3 |
| California | 23.3 | 6,726 | 12.1 | 1,261,974 | 8.0 | 6.1 |
| San Mateo | 16.3 | 8,103 | 12.4 | 19,216 | 4.3 | 3.3 |
| Illinois | 25.0 | 6,566 | 10.5 | 1,070,906 | 10.6 | 4.5 |
| De Kalb | 15.9 | 5,952 | 11.8 | 1/ | --- | 2.4 |
| Stephenson | 16.2 | 5,476 | 10.4 | 1,489 | 3.2 | 3.0 |
| Massachusetts | 21.6 | 6,272 | 11.6 | 125,434 | 2.4 | 4.2 |
| Berkshire | 16.1 | 6,121 | 11.1 | 1,512 | 1.1 | 5.0 |
| Washington | 23.4 | 6,225 | 12.1 | 101,539 | 3.6 | 6.6 |
| Clark | 15.7 | 6,231 | 11.6 | 1/ | --- | 6.7 |
| Colorado | 27.5 | 5,780 | 12.1 | 53,247 | 3.0 | 4.0 |
| Boulder | 16.1 | 6,114 | 12.5 | 1/ | --- | 3.0 |
| Ohio | 24.0 | 6,171 | 10.9 | 796,699 | 8.2 | 5.5 |
| Crawford | 14.5 | 5,768 | 11.4 | 1/ | --- | 4.2 |
| Fairfield | 16.1 | 5,512 | 10.7 | 1/ | --- | 4.8 |
| Michigan | 24.1 | 6,256 | 10.8 | 737,329 | 9.4 | 6.9 |
| Eaton | 9.1 | 5,821 | 11.3 | 1/ | --- | 4.7 |
| Kalamazoo | 15.7 | 6,526 | 11.7 | 6,096 | 3.6 | 4.1 |
| Marquette | 12.6 | 5,022 | 10.9 | 1,238 | 2.2 | 8.7 |
| Midland | 11.1 | 6,627 | 12.1 | 1/ | --- | 4.8 |
| Pennsylvania | 24.5 | 5,719 | 10.2 | 865,362 | 7.6 | 6.2 |
| Franklin | 15.5 | 4,882 | 9.1 | 1,763 | 2.0 | 5.0 |
| Northhampton | 16.2 | 5,709 | 9.5 | 2,511 | 1.2 | 4.2 |
| Middle per capita income group | | | | | | |
| Oregon | 23.2 | 5,892 | 11.8 | 36,650 | 2.1 | 6.0 |
| Clackmas | 13.9 | 6,129 | 12.0 | 1/ | --- | 4.9 |
| Missouri | 24.7 | 5,127 | 9.6 | 396,846 | 9.2 | 4.1 |
| Boone | 14.3 | 4,975 | 12.1 | 3,480 | 6.3 | 2.7 |
| Franklin | 16.3 | 4,863 | 8.7 | 1/ | --- | 5.4 |
| Indiana | 23.9 | 5,798 | 10.8 | 273,944 | 5.9 | 4.2 |
| Johnson | 12.2 | 6,236 | 11.7 | 1/ | --- | 2.9 |
| Miami | 15.4 | 4,917 | 11.4 | 1/ | --- | 5.4 |
| Wisconsin | 21.8 | 5,926 | 10.4 | 92,874 | 2.4 | 3.9 |
| Fond du Lac | 16.0 | 5,527 | 9.8 | 1/ | --- | 2.8 |
| Kansas | 22.1 | 5,295 | 11.7 | 99,945 | 4.6 | 3.7 |
| Douglas | 8.8 | 5,251 | 12.3 | 3,125 | 7.1 | 2.8 |
| Iowa | 21.9 | 5,069 | 11.3 | 28,828 | 1.0 | 3.2 |
| Clinton | 16.3 | 5,690 | 11.1 | 1/ | --- | 3.6 |
| Linn | 14.4 | 6,359 | 12.1 | 1,359 | 1.0 | 2.4 |
| Story | 16.5 | 5,410 | 12.5 | 1/ | --- | 2.8 |

See footnotes at end of table.

TABLE 21.— INFANT MORTALITY RATE AND SELECTED SOCIO-ECONOMIC CHARACTERISTICS, 1960 CENSUS: UNITED STATES, 29 COUNTIES WITH 1,000 OR MORE LIVE BIRTHS AND INFANT MORTALITY RATE, 16.5 OR LESS (1960), AND RESPECTIVE STATES, LISTED ACCORDING TO STATE AVERAGE PER CAPITA INCOME 1960-62)—Continued

(Infant mortality rate is number of deaths under 1 year per 1,000 live births, by place of residence)

| STATE PER CAPITA INCOME GROUP (1960-62) STATE, AND COUNTY | Infant mortality rate | Median family income 1959 (dollars) | PERSONS 25 YEARS OLD AND OVER | NONWHITE POPULATION | | CIVILIAN LABOR FORCE |
|---|---|---|---|---|---|---|
| | | | Median school year completed | Total | Percent of all races | Percent unemployed |
| Low per capita income group | | | | | | |
| Maine | 25.5 | 4,873 | 11.0 | 5,974 | 0.6 | 6.5 |
| Androscoggin | 14.8 | 5,113 | 9.4 | 1/ | --- | 5.9 |
| Idaho | 22.9 | 5,259 | 11.8 | 9,808 | 1.5 | 5.7 |
| Bonneville | 15.9 | 6,446 | 12.3 | 1/ | --- | 4.2 |
| Arkansas | 27.4 | 3,184 | 8.9 | 390,569 | 21.9 | 6.0 |
| Sebastian | 14.1 | 4,241 | 10.5 | 4,608 | 6.9 | 8.1 |
| UNITED STATES | 25.3 | 5,660 | 10.6 | 20,491,443 | 11.4 | 5.1 |

1/ Less than 1,000 nonwhite population.

SOURCES OF DATA: Vital Statistics Division, Public Health Service, for data on infant deaths and live births. For data on family income, unemployment, schooling, and percent nonwhite, the U. S. Bureau of the Census, U. S. Census of Population, 1960, General Social and Economic Characteristics, Tables 35, 36, and 87, in PC (1) for pertinent States, and tables 76 and 106 in PC (1) - 1C, United States Summary, Final Report; and General Population Characteristics, United States Summary, Final Report PC (1) - 1B, Table 56. State per capita income (payments to individuals) data are those of Department of Commerce, in Survey of Current Business, Vol. 41, No. 8, 1961; Vol. 42, No. 8, 1962, and Vol. 43, No. 4, 1963.

Table 22.—INFANT MORTALITY RATE AND SELECTED SOCIO-ECONOMIC CHARACTERISTICS, 1960 CENSUS: UNITED STATES, 37 COUNTIES WITH 1,000 OR MORE BIRTHS AND INFANT MORTALITY RATE, 40.0 OR MORE (1960), AND RESPECTIVE STATES, ACCORDING TO STATE AVERAGE PER CAPITA INCOME (1960-62).

(Infant mortality rate is number of deaths under 1 year per 1,000 live births)

| STATE PER CAPITA INCOME GROUP (1960-62) STATE, AND COUNTY | Infant mortality rate | Median family income 1959 (dollars) | PERSONS 25 YEARS OLD AND OVER | NONWHITE POPULATION | | CIVILIAN LABOR FORCE |
|---|---|---|---|---|---|---|
| | | | Median school year completed | Total | Percent of all races | Percent unemployed |
| High per capita income group | | | | | | |
| New York | 24.1 | 6,371 | 10.7 | 1,495,233 | 8.9 | 5.2 |
| Franklin | 44.4 | 4,639 | 9.3 | 1,777 | 4.0 | 14.6 |
| Colorado | 27.5 | 5,780 | 12.1 | 53,247 | 3.0 | 4.0 |
| El Paso | 47.8 | 5,514 | 12.3 | 6,174 | 4.3 | 5.6 |
| Middle per capita income group | | | | | | |
| Arizona | 31.9 | 5,568 | 11.3 | 132,644 | 10.2 | 5.3 |
| Navajo | 60.6 | 4,237 | 9.2 | 1,663 | 4.4 | 8.5 |
| Apache | 55.6 | 2,832 | 5.0 | 23,601 | 77.5 | 13.9 |
| Coconino | 47.2 | 5,398 | 10.9 | 12,916 | 30.9 | 7.2 |
| Florida | 29.7 | 4,722 | 10.9 | 887,679 | 17.9 | 5.0 |
| Gadsden | 65.5 | 2,866 | 7.5 | 24,940 | 59.4 | 2.7 |
| Texas | 28.9 | 4,884 | 10.4 | 1,204,846 | 12.6 | 4.5 |
| Hale | 45.5 | 4,650 | 10.5 | 2,017 | 5.5 | 3.5 |
| Lubbock | 43.4 | 5,425 | 11.6 | 12,518 | 8.0 | 3.8 |
| Low per capita income group | | | | | | |
| Alabama | 32.4 | 3,937 | 9.1 | 983,131 | 30.1 | 5.7 |
| Russell | 43.4 | 3,325 | 7.3 | 23,003 | 49.6 | 6.9 |
| Dallas | 42.3 | 2,846 | 8.8 | 32,714 | 57.7 | 5.7 |
| Talladega | 40.5 | 3,832 | 8.9 | 20,968 | 32.0 | 6.4 |
| Arkansas | 27.4 | 3,184 | 8.9 | 390,569 | 21.9 | 6.0 |
| Mississippi | 45.5 | 2,725 | 8.0 | 20,735 | 29.5 | 9.0 |
| Phillips | 40.3 | 2,360 | 7.6 | 25,450 | 57.8 | 8.0 |
| Crittenden | 40.1 | 2,506 | 7.4 | 28,087 | 59.1 | 6.7 |
| Kentucky | 27.9 | 4,051 | 8.7 | 218,073 | 7.2 | 6.0 |
| Christian | 56.8 | 3,740 | 9.0 | 1,869 | 3.3 | 4.7 |
| Warren | 40.0 | 3,572 | 8.8 | 998 | 2.2 | 5.0 |
| Louisiana | 32.0 | 4,272 | 8.8 | 1,045,307 | 32.1 | 6.1 |
| Bassier | 45.6 | 4,568 | 11.3 | 14,276 | 24.8 | 6.7 |
| Rapides | 44.2 | 3,783 | 9.1 | 34,013 | 30.5 | 6.8 |
| Mississippi | 41.6 | 2,884 | 8.9 | 920,595 | 42.3 | 5.4 |
| Lauderdale | 55.3 | 3,737 | 10.1 | 23,452 | 34.9 | 5.4 |
| Coahoma | 52.7 | 2,101 | 7.3 | 31,561 | 68.3 | 7.0 |
| Leflore | 50.7 | 2,285 | 7.9 | 30,503 | 64.7 | 7.0 |
| Sunflower | 50.7 | 1,790 | 7.0 | 31,049 | 67.9 | 5.0 |
| Washington | 45.9 | 3,112 | 8.4 | 43,328 | 55.1 | 8.2 |
| Madison | 44.4 | 1,862 | 7.8 | 23,671 | 71.9 | 4.8 |
| Warren | 44.3 | 3,547 | 9.1 | 19,752 | 46.8 | 6.1 |
| Forrest | | 4,004 | 11.0 | 14,754 | 28.0 | 4.5 |
| Jones | 42.2 | 3,993 | 9.6 | 15,479 | 26.0 | 4.6 |
| Bolivar | 40.7 | 1,768 | 6.7 | 36,910 | 67.8 | 8.5 |

Table 22.—INFANT MORTALITY RATE AND SELECTED SOCIO-ECONOMIC CHARACTERISTICS, 1960 CENSUS: UNITED STATES, 37 COUNTIES WITH 1,000 OR MORE BIRTHS AND INFANT MORTALITY RATE, 40.0 OR MORE (1960), AND RESPECTIVE STATES, ACCORDING TO STATE AVERAGE PER CAPITA INCOME (1960-62).—Continued

(Infant mortality rate is number of deaths under 1 year per 1,000 live births)

| STATE PER CAPITA INCOME GROUP (1960-62) STATE, AND COUNTY | Infant mortality rate | Median family income 1959 (dollars) | PERSONS 25 YEARS OLD AND OVER | NONWHITE POPULATION | | CIVILIAN LABOR FORCE |
|---|---|---|---|---|---|---|
| | | | Median school year completed | Total | Percent of all races | Percent unemployed |
| Low per capita income group—continued | | | | | | |
| New Mexico | 33.2 | 5,371 | 11.2 | 75,260 | 7.9 | 5.9 |
| McKinley | 55.1 | 4,397 | 8.4 | 21,593 | 58.0 | 8.7 |
| Valencia | 40.6 | 5,615 | 10.1 | 5,293 | 13.5 | 6.1 |
| North Carolina | 31.7 | 3,956 | 8.9 | 1,156,870 | 25.4 | 4.5 |
| Duplin | 51.7 | 2,151 | 8.1 | 15,161 | 37.6 | 3.0 |
| South Carolina | 34.3 | 3,821 | 8.7 | 831,572 | 34.9 | 4.1 |
| Orangeburg | 49.9 | 2,603 | 8.2 | 41,221 | 60.1 | 4.5 |
| Florence | 46.7 | 3,232 | 8.5 | 36,467 | 43.2 | 3.9 |
| Williamsburg | 44.2 | 1,631 | 7.4 | 27,229 | 66.5 | 3.7 |
| Darlington | 40.7 | 3,231 | 8.1 | 23,496 | 44.4 | 3.2 |
| Tennessee | 29.4 | 3,949 | 8.8 | 589,336 | 16.5 | 5.2 |
| Madison | 45.6 | 3,509 | 8.9 | 20,680 | 34.1 | 5.2 |
| Virginia | 29.8 | 4,964 | 9.9 | 824,506 | 20.8 | 4.2 |
| Buchanan | 50.6 | 2,992 | 6.5 | 1/ | --- | 6.3 |

1/Less than 1,000 nonwhite population.

SOURCES OF DATA: See table 21.

Table 23. MAIN CAUSES OF DEATH AMONG CHILDREN, 1-14 YEARS, BY AGE GROUP: UNITED STATES, 1951 AND 1961

(Rates for 1951 are in terms of the Sixth Revision of the International Lists and for 1961 of the Seventh Revision)

| MAIN CAUSES | CATEGORY NUMBER | RATE PER 100,000 CHILDREN[1] | | Percent change 1951-61 |
|---|---|---|---|---|
| | | 1961 | 1951 | |
| **1-14 YEARS** | | | | |
| ALL CAUSES | ... | 61.6 | 87.1 | -29.3 |
| Accidents | E800-E962 | 22.0 | 28.1 | -21.7 |
| Accidents, except motor vehicle | E800-E802,E840-E962 | 13.8 | 18.1 | -23.8 |
| Motor vehicle accidents | E810-E835 | 8.2 | 10.0 | -18.0 |
| Malignant neoplasms | 140-205 | 8.1 | 8.4 | -3.6 |
| Congenital malformations | 750-759 | 6.0 | 5.6 | +7.1 |
| Influenza and pneumonia | 480-493 | 5.4 | 8.9 | -39.3 |
| Gastritis, duodenitis, etc. | 543,571,572 | 1.2 | 2.2 | -45.5 |
| Meningitis, except meningococcal and tuberculous | 340 | 1.1 | 1.4 | -21.4 |
| Diseases of the heart | 400-402,410-443 | 1.0 | 2.6 | -61.5 |
| Symptoms and ill-defined conditions | 780-793,795 | 1.0 | 1.9 | -47.4 |
| Vascular lesions | 330-334 | 0.7 | 0.7 | 0 |
| All other causes | ... | 15.0 | 27.3 | -45.1 |
| **1-4 YEARS** | | | | |
| ALL CAUSES | ... | 101.7 | 137.1 | -25.8 |
| Accidents | E800-E962 | 30.8 | 36.3 | -15.2 |
| Accidents, except motor vehicle | E800-E802,E840-E962 | 21.1 | 24.9 | -15.3 |
| Motor vehicle accidents | E810-E835 | 9.7 | 11.4 | -14.9 |
| Influenza and pneumonia | 480-493 | 13.1 | 19.0 | -31.1 |
| Congenital malformations | 750-759 | 11.9 | 11.3 | +5.3 |
| Malignant neoplasms | 140-205 | 10.4 | 11.8 | -11.9 |
| Gastritis, duodenitis, etc. | 543,571,572 | 3.3 | 5.5 | -40.0 |
| Meningitis, except meningococcal and tuberculous | 340 | 2.6 | 2.8 | -7.2 |
| Symptoms and ill-defined conditions | 780-793,795 | 2.3 | 3.9 | -41.0 |
| Bronchitis | 500-502 | 1.6 | 2.4 | -33.3 |
| Measles | 085 | 1.4 | 2.2 | -36.4 |
| All other causes | ... | 24.3 | 41.8 | -41.9 |
| **5-14 YEARS** | | | | |
| ALL CAUSES | ... | 43.9 | 59.3 | -26.0 |
| Accidents | E800-E962 | 18.2 | 23.5 | -22.6 |
| Accidents, except motor vehicle | E800-E802,E840-E962 | 10.6 | 14.3 | -25.9 |
| Motor vehicle accidents | E810-E835 | 7.6 | 9.2 | -17.4 |
| Malignant neoplasms | 140-205 | 7.1 | 6.5 | +9.2 |
| Congenital malformations | 750-759 | 3.5 | 2.4 | +45.8 |
| Influenza and pneumonia | 480-493 | 2.1 | 3.2 | -34.4 |
| Diseases of the heart | 400-402,410-443 | 1.0 | 3.2 | -68.8 |
| Vascular lesions | 330-334 | 0.7 | 0.6 | +16.7 |
| Benign neoplasms | 210-239 | 0.6 | 0.7 | -14.3 |
| Homicide | E964,980-985 | 0.5 | 0.4 | +25.0 |
| Anemias | 290-293 | 0.5 | 0.4 | +25.0 |
| All other causes | ... | 9.9 | 18.4 | -46.2 |

[1] Items are independently rounded.



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